PB83-126870

Regulations and Non-Regulatory Revisions to State Implementation Plan: Georgia

Atlantic Environmental Associates, Inc.
Waltham, MA

Prepared for

Environmental Protection Agency
Research Triangle Park, NC

Oct 81

U.S. Department of Commerce
National Technical Information Service
NTIS

United States
Environmental Protection
Agency

Office of Air Quality
Planning and Standards
Research Triangle Park NC 27711

EPA-450/2-81-030
July 1981

PB83-126870

Air

EPA

Regulations and Non-Regulatory Revisions to State Implementation Plan: Georgia

REPRODUCED BY
NATIONAL TECHNICAL
INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA 22161

EPA-450/2-81-030

Regulations and Non-Regulatory Revisions to State Implementation Plan: Georgia

By

Atlantic Environmental Associates, Inc.
59 Vernon Street
Waltham, MA 02154

Contract No. 68-02-3565

EPA Project Officer: Willis P. Beal

Prepared for

U.S ENVIRONMENTAL PROTECTION AGENCY
Control Programs Development Division
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

July 1981

TECHNICAL REPORT DATA

(Please read Instructions on the reverse before completing)

1. REPORT NO. EPA-450/2-81-030	2.	3. RECIPIENT'S ACCESSION NO. PB83 126870
4. TITLE AND SUBTITLE Regulations and Non-Regulatory Revisions to State Implementation Plan: Georgia		5. REPORT DATE October, 1981 6. PERFORMING ORGANIZATION CODE
7. AUTHOR(S)		8. PERFORMING ORGANIZATION REPORT NO.
9. PERFORMING ORGANIZATION NAME AND ADDRESS Atlantic Environmental Associates, Inc. 59 Vernon Street Waltham, MA 02154		10. PROGRAM ELEMENT NO. 11. CONTRACT/GRANT NO. 68-02-3565
12. SPONSORING AGENCY NAME AND ADDRESS Control Programs Development Division Office of Air Quality Planning and Standards Research Triangle Park, NC 27711		13. TYPE OF REPORT AND PERIOD COVERED 14. SPONSORING AGENCY CODE

15. SUPPLEMENTARY NOTES

EPA Project Officer: Willis P. Beal

16. ABSTRACT

This document has been produced in compliance with Section 110(h) of the Clean Air Act, as amended in 1977, which mandates periodic publication of State Implementation Plan (SIP) requirements. The first section of the document comprises the Federally approved SIP regulations. It consists of the EPA-approved State and/or local air pollution control regulations cited by reference in the Federal Register; regulations promulgated as of August 1, 1981 have been included in this document.

The present compilation constitutes an update of a previous documentation of regulations as of July 1, 1979. State and/or local air quality regulations which have not been Federally approved as of August 1, 1981, are not included. However, any omissions of regulations from this document in no way affects the ability of the respective Federal, State, or local agencies to enforce such regulations. A summary sheet of the regulatory revisions is provided to give a quick historical assessment of the changes.

The second part of the document contains the text of non-regulatory SIP revisions approved by EPA up to August 1, 1981, excluding notices or certifications of public hearings and technical support data. A complete tabulation of these revisions is also provided.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Air Pollution State Regulations State Implementation Plans		

18. DISTRIBUTION STATEMENT Release Unlimited	19. SECURITY CLASS *(This Report)* Unclassified	21. NO. OF PAGES 108
	20. SECURITY CLASS *(This page)* Unclassified	22. PRICE

EPA Form 2220-1 (Rev. 4-77) PREVIOUS EDITION IS OBSOLETE

This report has been reviewed by the Control Programs Development Division of the Office of Air Quality Planning and Standards, EPA, and approved for publication. Mention of trade names or commercial products is not intended to constitute endorsement or recommendation for use. Copies of the entire document are available for inspection and copying at EPA Headquarters (401 M Street SW, Washington, DC 20460), EPA's Office of Air Quality Planning and Standards (Room 826, 411 West Chapel Hill Street, Durham, NC 27701), and the appropriate EPA Regional Offices. Documents containing only the regulatory portions of each State Implementation Plan may be ordered for a nominal fee from the National Technical Information Services, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161.

PREFACE

This document has been produced in compliance with Section 110(h) of the Clean Air Act, as amended in 1977, which mandates periodic publication of State Implementation Plan (SIP) requirements. The first section of the document comprises the Federally approved SIP regulations. It consists of the EPA approved State and/or local air pollution control regulations cited by reference in the Federal Register; all regulations Federally promulgated as of August 1, 1981 have been included.

The present compilation constitutes an update of a previous documentation of regulations as of July 1, 1979.* State and/or local air quality regulations which have not been Federally approved as of August 1, 1981 are not included. However, any omissions of regulations from this document in no way affects the ability of the respective Federal, State or local agencies to enforce such regulations.

This document is not intended to provide a tool for determining the enforceability of any given regulation. Rather, it is intended to provide a comprehensive compilation of those regulations which are incorporated by reference into Title 40, Part 52, of the Code of Federal Regulations (CFR). The exclusion of a Federally approved regulation from this document does not diminish the enforceability of the regulation. Similarly, the inclusion of a given regulation in this document does not, in itself, render the regulation enforceable by either the State or EPA.

The regulations have been organized in this document according to the official State/local agency format. However, since State air quality regulations vary widely in their organization, content, and language, a standardized subject index has been added. The index listings consist of both pollutant and activity oriented categories to facilitate usage. For example, regulations which apply to copper smelters may be found under sulfur compounds (50.2), particulate matter process weight (50.1.1), or copper smelters (51.15). Federal regulations pertaining to a given State are not included herein but can be found under Title 40 Code of Federal Regulations, Part 52.

Additionally, a summary sheet of the regulatory revisions is included to provide a quick historical assessment of the changes. These summary sheets contain the date of submittal to EPA of each revision and the Federal Register publication date on which the revision was approved by EPA. A brief description of the regulation which was submitted is also included.

In accordance with the Act, the second part of the document contains non-regulatory SIP revisions approved by EPA up to August 1, 1981. All approved non-regulatory revisions listed under Identification of Plan in the CFR are included except notices or certifications of public hearings, and technical support data. Non-regulatory submittals which have only received EPA approval on selected elements are included in their entirety with an accompanying indication of the status of Federal actions on the non-approved elements. The non-regulatory revisions have been organized in this document according to the date of publication of EPA approval in the Federal Register. For historical completeness, a complete tabulation of these revisions is provided at the beginning of this second section.

---

* Regulations and Non-Regulatory Revisions to State Implementation Plan: Georgia, EPA-450/2-80-017, prepared under Contract 68-02-3388, July 31, 1980.

SUMMARY OF
EPA-APPROVED REGULATORY REVISIONS TO STATE OF GEORGIA SIP
BETWEEN JULY 1, 1979 AND JULY 31, 1981

Publication of Approval	Submittal Date	Page	Document Description
09/18/79 and 01/03/80	01/17/79 03/09/79	44FR54050 45FR781	Conditional approval is given to the following portions of the revisions: Changes in the Georgia ambient air quality standards, regulations for the prevention of significant deterioration of air quality, additional emission standards, and rules concerning source monitoring, permits, exceptions, exemptions, and enforcement.

TABLE OF CONTENTS

STATE REGULATIONS

Revised Standard Subject Index	Section Number	Title	Page
-	Chapter 391-3-1	Air Quality Control	1
(1.0)	391-3-1-.01	Definitions	1
(2.0)	391-3-1-.02	Provisions	9
(3.0)	391-3-1-.02(1)	General Requirement	9
(4.0)	391-3-1-.02(2)	Emission Standards	9
(2.0)	391-3-1-.02(2)(a)	General Provisions	9
(50.1.2)	391-3-1-.02(2)(b)	Visible Emissions	18
(51.9)	391-3-1-.02(2)(c)	Incinerators	19
(51.5)(51.7)	391-3-1-.02(2)(d)	Fuel Burning Equipment	20
(50.1)	391-3-1-.02(2)(e)	Particulate Emission From Manufacturing Processes	23
(50.7)	391-3-1-.02(2)(f)	Fluorides	26
(50.2)	391-3-1-.02(2)(g)	Sulfur Dioxide	26
(51.3)	391-3-1-.02(2)(h)	Portland Cement Plants	28
(51.10)	391-3-1-.02(2)(i)	Nitric Acid Plants	28
(51.18)	391-3-1-.02(2)(j)	Sulfuric Acid Plants	29
(51.8)	391-3-1-.02(2)(k)	Particulate Emission From Asphaltic Concrete Hot Mix Plants	29
(51.9)	391-3-1-.02(2)(l)	Conical Burners	30
(50.1)	391-3-1-.02(2)(n)	Fugitive Dust	31
(51.4)	391-3-1-.02(2)(o)	Cupola Furnaces For Metallurgical Melting	32
(51.21)	391-3-1-.02(2)(p)	Particulate Emissions From Kaolin and Fuller Earth Processes	33
(51.1)	391-3-1-.02(2)(q)	Particulate Emissions From Cotton Gins	36
(51.1)	391-3-1-.02(2)(r)	Particulate Emissions From Granular and Mixed Fertilizer Manufacturing Units	37
(50.3)	391-3-1-.02(2)(s)	Nitrogen Oxides	37
(50.4)	391-3-1-.02(2)(t)	VOC Emissions From Automobile and Light-Duty Truck Manufacturing	38

TABLE OF CONTENTS (Cont.)

Revised Standard Subject Index	Section Number	Title	Page	
(51.22)	391-3-1-.02(2)(u)	VOC Emission From Can Coating	39	
(51.22)	391-3-1-.02(2)(v)	VOC Emission From Coil Coating	41	
(51.22)	391-3-1-.02(2)(w)	VOC Emission From Paper Coating	42	
(51.22)	391-3-1-.02(2)(x)	VOC Emission From Fabric and Vinyl Coating	43	
(51.22)	391-3-1-.02(2)(y)	VOC Emission From Metal Furniture Coating	45	
(51.22)	391-3-1-.02(2)(z)	VOC Emissions From Large Appliance Surface Coating	46	
(51.22)	391-3-1-.02(2)(aa)	VOC Emissions From Wire Coating	47	
(51.16)	391-3-1-.02(2)(bb)	Petroleum Liquid Storage	48	
(51.16)	391-3-1-.02(2)(cc)	Bulk Gasoline Plants	49	
(51.16)	391-3-1-.02(2)(dd)	Bulk Gasoline Terminals	53	
(51.16)	391-3-1-.02(2)(ee)	Gasoline Dispensing Facility	54	
(51.23)	391-3-1-.02(2)(ff)	Cutback Asphalt	55	
(51.15)	391-3-1-.02(2)(gg)	Petroleum Refinery	56	
(51.24)	391-3-1-.02(2)(hh)	Solvent Metal Cleaning	58	
(9.0)	391-3-1-.02(3)	Sampling	63	
(4.0)	391-3-1-.02(4)	Ambient Air Standards	64	
(4.0)	391-3-1-.02(4)(a)	-	64	
(4.2)	391-3-1-.02(4)(b)	Sulfur Dioxide	64	
(4.1)	391-3-1-.02(4)(c)	Particulate Matter	64	
(4.5)	391-3-1-.02(4)(d)	Carbon Monoxide	65	
(4.6)	391-3-1-.02(4)(e)	Photochemical Oxidants	65	65
(4.6)	391-3-1-.02(4)(f)	Lead	65	65
(4.3)	391-3-1-.02(4)(g)	Nitrogen Dioxide	66	66
(51.13)	391-3-1-.02(5)	Open Burning	66	66
(13.)(9.0)	391-3-1-.02(6)	Source Monitoring	68	68
(17.0)	391-3-1-.02(7)	Prevention of Significant Deterioration of Air Quality	81	81
(10.0)	391-3-1-.02(8)	New Source Performance Standards	82	82

TABLE OF CONTENTS (Cont.)

Revised Standard Subject Index	Section Number	Title	Page	
(11.0)	391-3-1-.02(9)	Emission Standards For Hazardous Air Pollutants	85	85
(3.0)	391-3-1-.03	Permits	86	86
(8.0)	391-3-1-.04	Air Pollution Episodes	92	92
(5.0)	391-3-1-.05	Variances	93	93
(2.0)	391-3-1-.06	Water Quality Control	96	96
(9.0)	391-3-1-.07	Inspections and Investigations	96	96
(14.0)	391-3-1-.08	Confidentiality of Information	96	96
(15.0)	391-3-1-.09	Enforcement	97	97
(15.0)	391-3-1-.10	Continuance of Prior Rules	97	97

REVISED STANDARD SUBJECT INDEX

1.0 DEFINITIONS
2.0 GENERAL PROVISIONS AND ADMINISTRATIVE PROCEDURES
3.0 REGISTRATION CERTIFICATES, OPERATING PERMITS AND APPLICATIONS
4.0 AIR QUALITY STANDARDS (PRIMARY AND SECONDARY)
    4.1 PARTICULATES
    4.2 SULFUR DIOXIDE
    4.3 NITRIC OXIDES
    4.4 HYDROCARBONS
    4.5 CARBON MONOXIDE
    4.6 OXIDANTS
    4.7 OTHERS
5.0 VARIANCES
6.0 COMPLIANCE SCHEDULES
7.0 EQUIPMENT MALFUNCTION AND MAINTENANCE
8.0 EMERGENCY EPISODES
9.0 AIR QUALITY SURVEILLANCE AND SOURCE TESTING
10.0 NEW SOURCE PERFORMANCE STANDARDS
11.0 NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS
12.0 MOTOR VEHICLE EMISSIONS AND CONTROLS
13.0 RECORD KEEPING AND REPORTING
14.0 PUBLIC AVAILABILITY OF DATA
15.0 LEGAL AUTHORITY AND ENFORCEMENT
16.0 HEARINGS, COMPLAINTS, AND INVESTIGATIONS
17.0 PREVENTION OF SIGNIFICANT DETERIORATION
18.0 AIR QUALITY MAINTENANCE AREA
19.0 EMISSION OFFSET POLICY
20.0 MAJOR STATIONARY SOURCES
21.0 - 49.0
    RESERVED FOR FUTURE EXPANSION OF COMMON INDEX
50.0 POLLUTANT - SPECIFIC REGULATIONS
    50.1 PARTICULATES

        - 50.1.1 PROCESS WEIGHT
        - 50.1.2 VISIBLE EMISSIONS
        - 50.1.3 GENERAL
    - 50.2 SULFUR COMPOUNDS
    - 50.3 NITRIC OXIDES
    - 50.4 VOLATILE ORGANIC COMPOUNDS
    - 50.5 CARBON MONOXIDE
    - 50.6 ODOROUS POLLUTANTS
    - 50.7 OTHERS (Pb, Hg, etc.)
- 51.0 SOURCE CATEGORY SPECIFIC REGULATIONS
    - 51.1 AGRICULTURAL PROCESSES (includes Grain Handling, Orchard Heaters, Rice and Soybean Facilities, Related Topics)
    - 51.2 COAL OPERATIONS (includes Cleaning, Preparation, Coal Refuse Disposal Areas, Coke Ovens, Charcoal Kilns, Related Topics)
    - 51.3 CONSTRUCTION (includes Cement Plants, Materials Handling, Topics Related to Construction Industry)
    - 51.4 FERROUS FOUNDRIES (includes Blast Furnaces, Related Topics)
    - 51.5 FUEL BURNING EQUIPMENT (coal, natural gas, oil) - Particulates (includes Fuel Content and Other Related Topics)
    - 51.6 FUEL BURNING EQUIPMENT (coal, natural gas, oil) - SO_2 (includes Fuel Content and Other Related Topics)
    - 51.7 FUEL BURNING EQUIPMENT (oil, natural gas, coal) - NO_2 (includes Fuel Content and Other Related Topics)
    - 51.8 HOT MIX ASPHALT PLANTS
    - 51.9 INCINERATION
    - 51.10 NITRIC ACID PLANTS
    - 51.11 NON-FERROUS SMELTERS (Zn, Cu, etc.) - Sulfur Dioxide
    - 51.12 NUCLEAR ENERGY FACILITIES (includes Related Topic)
    - 51.13 OPEN BURNING (includes Forest Management, Forest Fire, Fire Fighting Practice, Agricultural Burning and Related Topics)
    - 51.14 PAPER PULP; WOOD PULP AND KRAFT MILLS (includes Related Topics)
    - 51.15 PETROLEUM REFINERIES
    - 51.16 PETROLEUM STORAGE (includes Loading, Unloading, Handling and Related Topics)
    - 51.17 SECONDARY METAL OPERATIONS (includes Aluminum, Steel and Related Topics)
    - 51.18 SULFURIC ACID PLANTS

51.19 SULFURIC RECOVERY OPERATIONS
51.20 WOOD WASTE BURNERS
51.21 MISCELLANEOUS TOPICS
51.22 COATING OPERATIONS (Can, Coil, Paper, Fabric, Vinyl, Metal, Wire, Surface Coating)
51.23 CUTBACK ASPHALT
51.24 SOLVENT METAL CLEANING

RULES
OF THE
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

CHAPTER 391-3-1
AIR QUALITY CONTROL

391-3-1-.01 DEFINITIONS.

Unless a different meaning is required by the context, the following terms as used in these rules shall have the meaning hereinafter respectively ascribed, except that to the extent terms are not defined in these rules and regulations the Act's definitions control; and provided, that definitions within any subsequent rule, or subdivision thereof, which are expressly made applicable to the rule or subdivision within which they appear, shall apply for purposes of such specific rule or subdivision thereof; and provided further, that definitions appearing in Federal regulations adopted by reference shall control in the application of the related Federal regulations to which they apply under the Federal Act.

(1) "Act" means Georgia Code Annotated, Chapter 43-27 (Georgia Laws 1978, page 275 et seq.), "The Georgia Air Quality Act of 1978."

(2) "Air-cleaning device" means any method, process or equipment which removes, reduces, or renders less noxious air contaminants discharged into the atmosphere.

(3) "Air contaminant" means solid or liquid particulate matter, dust, fumes, gas, mist, smoke, or vapor, or any matter or substance either physical, chemical, biological, or radioactive (including source material, special nuclear material, and by-product material); or any combination of any of the above.

(4) "Air pollution" means the presence in the outdoor atmosphere of one or more air contaminants.

(5) "CFR" means the "Code of Federal Regulations."

(6) "Capacity Factor" means the ratio of the average load on a machine or equipment for the period of time considered, to the design capacity rating of the machine or equipment.

(7) "Capture system" means the equipment (including hoods, ducts, fans, etc.) used to contain, cap-

ture, or transport a pollutant to an air-cleaning device.

(8) "Coating Applicator" means an apparatus used to apply a surface coating.

(9) "Coating line" means one or more apparatus or operations which include a coating applicator, flash-off area, and oven wherein a surface coating is applied, dried, or cured.

(10) "Conditions beyond the control of" shall mean only those conditions which, though ordinary diligence be employed, remain unforeseeable, or unpredictable, such as, strikes, walkouts, or other industrial distrubances, acts of God, civil disturbances, embargoes, or other causes of like character; provided, however, that this term shall not include conditions solely because they are dependent upon contingencies, that is, conditions such as, but not limited to, the variable cost or availability of maintenance, equipment, labor, raw materials, fuel or energy.

(11) "Construction" means any fabrication, erection or installation. The term "construction" includes any modification as defined in Section (32).

(12) "Day" means a 24-hour period beginning at midnight or such other 24-hour period as agreed by the Director.

(13) "Department" means the Department of Natural Resources of the State of Georgia.

(14) "Director" means the Director of the Division of Environmental Protection, Department of Natural Resources of the State of Georgia, or his designee.

(15) "Division" means the Environmental Protection Division of the Department of Natural Resources, State of Georgia.

(16) "Dust" means minute solid particles caused to be suspended in air by natural forces or by mechanical processes such as but not limited to crushing, grinding, milling, drilling, demolishing, shoveling, conveying, covering, bagging, mixing, sweeping, digging, scooping, and grading.

(17) "EPA" means the United States Environmental Protection Agency.

(18) "Emission" or "emitting" means any discharging, giving off, sending forth, placing, dispensing, scattering, issuing, circulating, releasing or any other emanation of any air contaminant or or contaminants into the atmosphere.

(19) The terms "emission limitation" and "emission standard" means a requirement established which which limits the quantity, rate, or concentration of emissions of air contaminants on a continuous basis including any requirement relating to the equipment or operation or maintenance of a source to assure continuous emission reduction.

(20) "Excessive emissions" means emissions of an air pollutant in excess of an emission standard.

(21) "Flashoff area" means the space between the application area and the oven.

(22) "Fly ash" means particulate matter capable of being gas-borne or air-borne and consisting essentially of fused ash or other burned or unburned materials resulting from a process of combustion of fuel or solid waste.

(23) "Fossil fuel-fired steam generator" means a furnace or boiler used in the process of burning a fossil fuel for the primary purpose of producing steam by heat transfer.

(24) "Foundry cupola" means a stack-type furnace used for melting of metals, consisting of, but not limited to, furnace proper, tuyeres, fans or blowers, tapping spout, charging equipment, gas cleaning devices and other auxiliaries.

(25) "Fuel-burning equipment" means equipment the primary purpose of which is the production of thermal energy from the combustion of any fuel. Such equipment is generally that used for, but not limited to, heating water, generating or superheating steam, heating air as in warm air furnaces, furnishing process heat indirectly, through transfer by fluids or transmission through process vessel walls.

(26) "Fugitive dust" means solid airborne particulate matter emitted from any source other than through a stack, vent, or chimney.

(27) "Hydrocarbon" means any organic compound consisting predominantly of carbon and hydrogen.

(28) "Incinerators" means all devices intended or used

for the reduction or destruction of solid, liquid, or gaseous waste by burning.

(29) "Intermediate vapor control system" means a vapor control system that employs an intermediate vapor holder to accumulate vapors displaced from tanks during filling. The control device treats the accumulated vapors only during automatically controlled cycles.

(30) "Jobbing foundry" means any foundry where the operation is run intermittently and for that length of time necesary to pour molds on a job-to-job basis.

(31) "Loading rack" means any aggregation or combination of gasoline loading equipment arranged so that all loading outlets in the combination can be connected to a tank truck or trailer parked in a specified loading space.

(32) "Malfunction" means mechanical and/or electrical failure of a process, or of air pollution control process, or equipment, resulting in operation in an abnormal or unusual manner.

(33) The term "modification" means any change in or alteration of fuels, processes, operation or equipment, (including any chemical changes in processes or fuels) which affects the amount or character of any air pollutant emitted or which results in the emission of any air pollutant not previously emitted. [No source shall, by reason of a change which decreases emissions, become subject to the New Source Performance Standards 42 U.S.C. Sec. 7411, unless required by the Federal Act. This definition does not apply where the word "modification" is used to refer to action by the Director, Division, or Board, in modifying or changing rules, regulations, orders, or permits. In that context the word has its ordinary meaning.]

(34) "Multiple chamber incinerator" means any article, machine, equipment, or contrivance which is used for the reduction or destruction of solid, liquid, or gaseous waste by burning and consists of a series of three or more combustion chambers physically separated by refractory walls, interconnected by gas passages or ducts, and lined with refractories having a pyrometric cone equivalent of at least 31, tested according to ASTM Method C-24, and is designed for efficient combustion of the type and volume of material to be burned.

(35) "Opacity" means the degree to which emissions

reduce the transmission of light and obscure the view of an object in the background, and is expressed in terms of percent opacity. As used in these regulations the measurement of percent opacity does not include the measurement of the obscuration of view due to uncombined water droplets. Percent opacity shall be determined by the averaging of six minutes of opacity data. With respect to the visual determination of percent opacity, the six minute average shall be based on an average of 24 visual readings taken at 15 second intervals over any sequential six minute period. With respect to to the determination of percent opacity by continuous opacity monitoring systems, the six minute average shall be based on either an average of 24 or more opacity data points equally spaced over a six minute period or an integrated average of continuous opacity data over a six-minute period. The six minute period for continuous opacity monitors shall be considered to be any one of the 10 equal parts of a one hour period commencing on the hour. Any visual observation or determination of opacity taken for the purpose of determining compliance with any requirement of this Chapter 391-3-1 shall be made either by personnel certified to make such opacity determination by the Division or EPA.

(36) "Open-burning" means any outdoor fire from which the products of combustion are emitted directly into the open air without passing through a stack, chimney or duct.

(37) "Organic material" means a chemical compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.

(38) "Oven" means a chamber within which heat is used to bake, cure, polymerize, or dry a surface coating.

(39) "Particulate matter" means material other than uncombined water, which is suspended in air or other gases as a liquid or solid, or would exist as a liquid or solid at 70 degrees F and 14.7 pounds per square inch absolute.

(40) The term "person" includes any individual, corporation, partnership, association, State, municipality, political subdivision of a State, and any agency, department, or instrumentality of the United States, or any other entity, and includes any officer, agent, or employee of any of the above.

(41) "Prime coat" means the first film of coating applied

in a multi-coat operation.

(42) "Process equipment" means any equipment, device or contrivance for changing, melting, storing, handling, or altering chemically or physically any material, the use or existence of which may cause any discharge of air contaminants into the open air, but excluding that equipment defined herein as "Fuel-burning equipment."

(43) "Process input weight rate" means a rate established as follows:

(a) For continuous or long-run, steady-state source operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period.

(b) For cyclical or batch source operations, the total process weight for a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period.

(c) Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this definition, the interpretation that results in the minimum value for allowable emission shall apply. When recycled material is handled by the process equipment, it shall be included in the total process weight. Moisture shall not be considered as a part of process weight.

(44) "Reid vapor pressure" means the absolute vapor pressure of volatile crude oil and volatile nonviscous petroleum liquids except liquified petroleum gases as determined by American Society for Testing and Materials, Part 17, 1973, D-323-72 (Reapproved 1977).

(45) "Shutdown" means the cessation of the operation of a source or facility for any purpose.

(46) "Solvent" means organic materials which are liquid at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents.

(47) "Smoke" means small gasborn particles resulting from incomplete combustion, consisting predominantly of carbon, ash and other combustible materials, that form a visible plume.

(48) "Soot" means agglomerated particles consisting

mainly of carbonaceous material.

(49) "Source" or "facility" means any property, source, facility, building, structure, location, or installation at, from, or by reason of which emissions of air contaminants are or may reasonably be expected to be emitted into the atmosphere. Such terms include both real and personal property, stationary and mobile sources or facilities, and direct and indirect sources or facilities, without regard to ownership, and both public or private property. An "indirect" source or facility is a source or facility which attracts or tends to attract activity that results in emissions of any air pollutant for which there is an ambient air standard.

(50) "Special circumstances" shall mean only such circumstances as are caused by special physical conditions or causes and are unique or peculiar to to a pollution source.

(51) "Special physical conditions or causes" shall mean only those physical conditions or causes which are intrinsically related to the process giving rise to a pollutant, the equipment used in such process, or the structure housing such equipment, and such term shall in no case include external conditions such as (a) the ambient air quality in the locale, area, or region of the pollution source, or (b) the cost or availability of raw materials, including fuel or energy, used in the process.

(52) "Stack height" means the physical height of a flue, chimney, vent or other point of pollutant discharge above ground level.

(53) "Standard conditions" means a temperature of 20 degrees C (68 degrees F) and pressure of 760 millimeters of mercury (29.92 inches of mercury).

(54) "Startup" means the commencement of operation of any source.

(55) "Stationary source" means any source or facility emitting, either directly or indirectly, from a fixed location.

(56) "Topcoat" means the final film of coating applied in a multiple coat operation.

(57) "True vapor pressure" means the equilibrium partial pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institute Bulletin 2597, "Evaporation

Loss from Floating Roof Tanks," 1962.

(58) "Vapor" means the gaseous from of a substance.

(59) "Vapor collection system" means a vapor transport system which uses direct displacement by the liquid loaded to force vapors from the tank into a vapor control system.

(60) "Vapor control system" means a system that prevents release to the atmosphere of at least 90 percent by weight of organic compounds in the vapors displaced from a tank during the transfer of gasoline.

(61) "Visible emissions" means any emission which is capable of being perceived visually.

(62) "Volatile organic compounds" (also denoted as VOC) means any compound of carbon that has a vapor pressure greater than 0.1 millimeters of mercury at standard conditions excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, methane, ethane, 1,1,1-trichloroethane (methyl chloroform), and trichlorotrifluoroethane.

391-3-1-.02 PROVISIONS.

(1) General Requirement. No person shall construct or operate any facility from which air contaminants are or may be emitted in such a manner as to fail to comply with:

(a) any applicable standard of performance or other requirement established by EPA pursuant to Section 111 of the Federal Act; and

(b) Any applicable emission standard or other requirement for a hazardous air pollutant established by EPA pursuant to Section 112 of the Federal Act.

(c) Any applicable increment, precondition for permit, or other requirement established for the Prevention of Significant Deterioration pursuant to Part C, Title 1 of the Federal Act; and

(d) Any applicable standard, precondition for permit, or other requirement established for sources in areas designed by the Director as being non-attainment with National Ambient Air Quality Standards pursuant to, or as part of Georgia's State Implementation Plan to meet the requirements of, Part D, Title 1 of the Federal Act.

(2) Emission Standards

(a) General Provisions:

1. No person owning, leasing or controlling the operation of any air contaminant sources shall willfully, negligently, or through failure to provide necessary equipment or facilities or to take necessary precautions, cause, permit, or allow the emission from said air contamination source or sources of such quantities of air contaminants as will cause, or tend to cause, by themselves or inconjunction with other air contaminants, a condition of air pollution quantities or characteristics or of a duration which is injurious or which unreasonably interferes with the enjoyment of life or use of property in such area of the State as is affected thereby. Complying with any of the other sections of these rules and regulations or any subdivisions thereof, shall in no way exempt a person from this provision.

2. In cases where more than one section of these

* Operating limitations order for GA Power's Bowen plant units 1 and 2. See non compliance schedule Federal Register Publication 1/3/80

regulations applies, the section allowing the least emission of air contaminants to the atmosphere shall prevail.

3. Notwithstanding any other emission limitation or other requirement provided in the regulations, more stringent emission limitations or other requirements may be required of a facility as deemed necessary by the Director to

   (i) meet any existing Federal laws or regulations, or

   (ii) safeguard the public health, safety and welfare of the people of the State of Georgia.

4. Notwithstanding any other requirement of this chapter, in no event shall that part of a stack which exceeds good engineering practice stack height, or any other dispersion technique, be taken into account for the purpose of determining the degree of emission limitation required for control of any pollutant for which there is an ambient air standard established under the Act or the Federal Act. The term "dispersion technique" used herein includes any intermittent or supplemental control means varying with atmospheric conditions.

5. If the Director finds, after notice and opportunity for public hearing, that a particular instance of violation or noncompliance by a source, owner, or operator, with any emission limitation or standard or other requirement under the Act, is de minimus (as defined pursuant to 42 U.S.C. Section 7420 as amended) in nature and duration, he may, as allowed by the Act and the Federal Act, exempt such source, owner or operator from the noncompliance penalties provided in Section 20 of the Act.

6. (i) For all sources of VOC emissions otherwise subject to any limitation or requirement of subsections (t) through (hh) [inclusive] of this section 391-3-.02(2), the following sources shall not be subject to any requirement of such subsection.

   (I) Sources whose emissions of volatile organic compounds are not more than

50 pounds in any 1 day and not more than 5 pounds in any 1 hour, and;

(II) Sources used exclusively for chemical or physical analysis or determination of product quality and commercial acceptance provided;

I. The operation of the source is not an integral part of the production process; and, provided,

II. The emissions from the source do not exceed 800 pounds in any calendar month, and provided,

III. The exemption for such source is approved in writing by the Director;

(ii) All sources of VOC emissions subject to any limitation or requirement of, or under, subsection (t) through (hh) [inclusive] of this section 391-3-1-.02(2), shall comply with the following compliance schedules:

(I) For Process and Emission Control Equipment Installation and Modification:

I. Except as provided under Part (III) of this subparagraph (ii) the owner or operator of a VOC emission source subject to any requirement of or under subsections (t) through (hh) [inclusive] of section 391-3-1-.02(2) proposing to install VOC emission control equipment and/or modify process equipment in order to comply with such requirements, shall comply with the increments of progress contained in the following schedule:

A. A final control plan and application for a permit to construct for the installation of emission control systems and/or the modification of process equipment must be submitted to the Division no later than September 1, 1979 or 180 days after the EPA has promulgated the revised ozone standard, whichever is later.

B. Binding contracts or purchase orders must be entered into before July 1, 1980 or 480 days after the EPA has promulgated the revised ozone standard, whichever is later, for the installation of emission control tion of process equipment.

C. On-site construction of emission control systems and/or modification of process equipment must begin before December 1, 1980, or 630 days after the EPA has promulgated the revised ozone standard, whichever is later.

D. On-site construction of emission control systems and/or modification of process equipment must be completed before September 1, 1981, or 900 days after the EPA has promulgated the revised ozone standard, whichever is later.

E. Full compliance with the applicable requirements of these Rules (Chapter 391-3-1) must be demonstrated through approved methods and procedures before November 1, 1981, or 960 days after the EPA has promulgated the revised ozone standard, whichever is later.

F. Any owner or operator of a source subject to this compliance schedule shall certify in writing to the Director, within 5 days after the date specified in each increment of progress, whether the required increment of progress has been met.

(II) For Low Solvent Content Coating:

I. Except as provided under Part (III) of this subparagraph (ii) the owner or operator of a VOC emission source subject to any requirement of or under subsections (t) through (hh) [inclusive] of section 391-3-1-.02(2) proposing to employ low solvent content coating technology to comply with such requirements shall comply with the increments of progress contained in the following schedule:

A. A final control plan for the application of low solvent content coating technology must be submitted to the Division before September 1, 1979 or 180 days after the EPA has promulgated the revised ozone standard, whichever is later.

B. Evaluation of product quality and commercial acceptance must be completed before October 1, 1980, or 590 days after the EPA has promulgated the revised ozone standard, whichever is later.

C. Purchase orders must by issued for low solvent content coatings and process modifications before January 1, 1981, or 660 days after the EPA has promulgated the revised ozone standard, whichever is later.

D. Initiation of process modifications must begin before April 1, 1981, or 750 days after the EPA has promulgated the revised ozone standard, which ever is later.

E. Process modifications must be completed and use of low solvent content coatings must begin before September 1, 1981, or 900 days after the EPA has promulgated the revised ozone standard, whichever is later.

F. Full compliance with the applicable requirements of these Rules (Chapter 391-3-1) must be demonstrated through approved methods and procedures before November 1, 1981, or 960 days after the EPA has promulgated the revised ozone standard, whichever is later.

G. Any owner or operator of a source subject to this compliance schedule shall certify in writing to the Director within 5 days after the date specified for each increment of progress, whether the required increment of progress has been met.

(III) Alternate Compliance Schedule:

A. Nothing in this subparagraph (ii) shall prevent the Director from promulgating a separate schedule for any source if he finds that the imposition of of a compliance schedule under Parts (I) or (II) of this Section would be technologically or economically infeasible or impractical.

B. Nothing in this subparagraph (ii) shall prevent the owner or operator of a VOC source from submitting to the Director a proposed alternative compliance schedule provided:

(a) The proposed alternative compliance schedule and final control plan is submitted before September 1, 1979, or 180 days after the EPA has promulgated the revised ozone standard, whichever is later.

(b) The alternative compliance schedule contains increments of progress adequate to determine progress toward full compliance.

(c) Sufficient documentation and certification from appropriate suppliers, contractors, manufacturers, or fabricators is submitted by the owner or operator of the VOC source to justify to the Director the dates proposed in the increments of progress in such schedule.

C. Any alternative compliance schedule proposed or promulgated under this Part (III) shall require compliance by the VOC source with the applicable requirements of these Rules (Chapter 391-3-1) as expeditiously as practicable, as judged by the Director, and in no case later than three years after enactment of this rule and its approval as part of Georgia's State Implementation Plan by the Administrator.

D. Any compliance schedule approved under this Part (III) may be revoked at any time if the source fails to meet any of the increments of progress by the dates specified.

(iii) With respect to the applicability of of subsections (t) through (hh) [inclusive] of this section 391-3-1-.02(2), the Director shall, upon analysis of the ambient air in the State, determine those areas of the State, if any, which are not attaining the National Primary Ambient Air Quality Standards for either photochemical oxidants (ozone) or carbon monoxide, or which are areas contributing to the ambient air levels of such pollutants in such areas of nonattainment. The areas determined by the Director to be violating such standards for such pollutants, and areas determined to be contributing to such violations, shall be designated by the Director as provided in subsections (t) through (hh) [inclusive] as areas within which the requirements of such subsections shall apply to all sources of VOC emissions covered by such subsection regardless of size, unless exempted in subparagraph (i) hereof. In those areas not so designated by Director the requirements of subsections (t) through (hh) [inclusive, specially excluding (cc) and (ee)] shall apply to all sources with a potential to emit 100 tons (or more) per year of VOC. The Director's analyses and determinations shall be continuing and shall be conducted in a manner sufficient to meet the requirements of Title I, Part D of the Federal Act.

7. (i) Excess emissions resulting from start-up, shutdown, or malfunction of any source which occur though ordinary diligence is employed shall be allowed providing that (I) the best operational practices to minimize emissions are adhered to, and (II) all associated air pollution control equipment is operated in a manner consistent with good air pollution control practice for minimizing emissions, and (III) the duration of excess emissions is minimized.

(ii) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction are prohibited and are violation of their Chapter (391-3-1).

(iii) The provisions of this paragraph 7 shall apply only to those sources which are not subject to any requirement under section (8) of this Rule, (i.e. Rule 391-3-1-.02) or any requirement of 40 CFR, Part 60, as amended, concerning New Source Performance Standards.

8. With respect to the emission standards and limitations contained in this Chapter (391-3-1), as such requirements are applied to more than one process or piece of equipment at a single source, the Director is hereby authorized to allow to the extent consistent with the Act and the Federal Act, under such conditions as he shall deem appropriate,

Equivalent Alternative Emission Reduction Options, provided that:

(i) The source or facility proposing to use an equivalent alternative emission reduction option is and continues to be in compliance, pending consideration of any such proposal (and any associated review), with either:

  (I) The applicable emission requirements under this Chapter (391-3-1); or

  (II) Any final order or agreement of the Director (or any court decree) with respect to such source then currently in effect and containing a timetable and schedule of compliance requiring expeditious compliance with the applicable emission requirements under this Chapter (391-3-1) and providing for resolution of penalties, issues and other sanctions; and

(ii) Such option will not interfere with the attainment and maintenance of ambient air quality standards as expeditiously as practicable and does not result in delay in compliance by any source; and

(iii) Such option is equivalent in pollution reduction, enforceability, and environmental impact to existing individual process or equipment standards; and

(iv) The Source or facility proposing to use an option agrees, pending consideration of any such proposal (and any associated review), not to seek a stay of enforcement of or relief from any such requirement, order, agreement, or decree (see (i) above) in any administrative or judicial proceeding in State or Federal Courts and tribunals; and

(v) The source or facility proposing to use an option shall have the burden of demonstrating to the satisfaction of the Director, compliance with the requirements of subparagraphs (ii) and (iii) hereof; and

(vi) Provided further that any such option must receive the approval of EPA prior to becoming effective.

(b) Visible Emissions:

1. Except as may be provided in other more restrictive or specific rules or subdivisions of this Chapter, no person shall cause, let, suffer, permit, or allow emissions from any air contaminant source the opacity of which is equal to or greater than forty (40) percent.

2. Upon written application to the Director, a person owning or operating an air pollution source may request that visible emission evaluations (opacity measurements) be conducted during particulate emission tests for a source, for the purpose of demonstrating compliance with a particulate emission standard. Any such tests or evaluations shall be conducted according to methods, procedures and requirements approved by the Division. All test results shall be subject to verification by the Division. The correlated visible emissions opacity determined during any such particulate emission tests which demonstrate compliance (with results verified by the Division) may, if greater than any applicable visible emissions standard (opacity standard) of this Chapter 391-3-1, be established by the Director as the visible emission standard (opacity standard) for the source. Such visible emission standards if so established shall be incorporated as a condition of the operating permit for the air pollution source.

3. The visible emission limitation of this subsection applies to direct sources of emissions such as stationary structures, equipment, machinery, stacks, flues, pipes, exhausts, vents, tubes, chimneys or similar structures.

4. The provisions of this subsection (b), apply only to facilities or sources subject to some other emission limitation under this section 391-3-1-.02(2).

(c) Incinerators:

1. Except as specified in the section dealing with conical burners, no person shall cause or allow to be emitted into the open air from any incinerator constructed or extensively altered after January 1, 1972, air contaminants as follows:

    (i) units with more than 50 tons per day charging rate -- fly ash and/or other particulate matter in quantities exceeding 0.08 grains per standard dry cubic foot of flue gas, calculated to 12 percent carbon dioxide by volume for products of combustion;

    (ii) units with 50 tons or less per day charging rate-- fly as and/or other particulate matter in quantities exceeding 0.1 grains per standard dry cubic foot of flue gas, calculated to 12 percent carbon dioxide by volume for products of combustion;

    (iii) smoke the opacity of which is equal to or greater than 20 percent (Ringelmann No 1); or equal to or greater than 40 percent (Ringelmann No. 2) for three minutes in any one-half hour period.

2. No person shall cause or allow to be emitted into the air from any existing incinerator constructed and put into operation before January 1, 1972, air contaminants as follows:

    (i) fly ash and/or other particulate matter in quantities exceeding 0.2 grains per standard dry cubic foot of flue gas, calculated to 12 percent carbon dioxide by volume for products of combustion;

    (ii) smoke the opacity of which is equal to or greater than 40 percent (Ringelmann No. 2), or equal to or greater than 60 percent (Ringelmann No. 3) for three minutes in any one-half hour.

3. No person shall operate an existing incinerator after June 1, 1973, unless:

    (i) it is a multiple chamber incinerator,

(ii) it is provided with an auxiliary burner in the primary chamber for the purpose of creating preignition temperature of 800°F;

(iii) it has a secondary burner to control smoke and/or odors and maintain a temperature of at least 1500°F in the secondary chamber;

(iv) designs other than those mentioned above shall be considered on an individual basis and will be exempt from those provisions if, in the judgement of the Department, said design results in performance which meets the standards set forth in (2) (c) 1. and 2. above.

4. The limitations as outlined in (2) (c) 1. and 2. shall apply when the incinerator is operating at full load. The carbon dioxide produced by combustion of auxiliary fuels shall be excluded from the calculation to 12 percent carbon dioxide.

(d) Fuel-burning Equipment:

1. No person shall cause, let, suffer, permit, or allow the emission of fly ash and/or other particulate matter from any fuel-burning equipment in operation or under construction on or before January 1, 1972; in amounts equal to or exceeding the following:

(i) for equipment less than 10 million BTU heat input per hour

P = 0.7 pounds per million BTU heat input;

(ii) for equipment equal to or greater than 10 million BTU heat input per hour, or equal to or less than 2,000 million BTU heat input per hour:

$$P = 0.7 \left(\frac{10}{R}\right)^{0.202} \text{ pounds per million BTU heat input;}$$

(iii) equipment larger than 2,000 million BTU heat input per hour:

P = 0.24 pounds per million BTU heat input.

2. No person shall cause, let, suffer, permit, or allow the emission of fly ash and/or other particulate matter from any fuel-burning equipment constructed after January 1, 1972, in the amounts equal to or exceeding the following:

(i) for equipment less than 10 million BTU heat input per hour:

$P = 0.5$ pounds per million BTU heat input;

(ii) for equipment equal to or greater than 10 million BTU heat input per hour, or equal to or less than 250 million BTU heat input per hour:

$P = 0.5\left(\frac{10}{R}\right)^{0.5}$ pounds per million BTU heat input;

(iii) for equipment greater than 250 million heat input per hour:

$P = 0.10$ pounds per million BTU heat input

P = allowable weight of emission of fly ash and/or other particulate matter in pounds per million BTU heat input

R = heat input of fuel-burning equipment in million BTU per hour

Figure 1 on page 9 represents the requirement of paragraph (d) above.

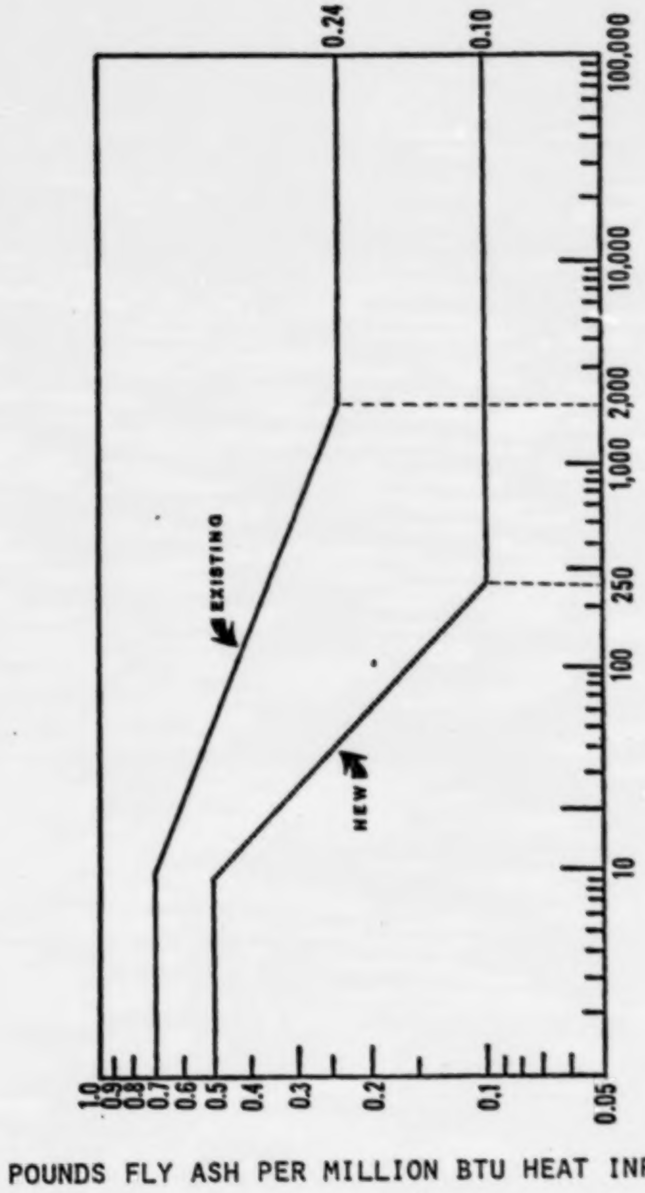
3. No person shall cause, let, suffer, permit, or allow the emission from any fuel-burning equipment constructed or extensively modified after January 1, 1972, visible emissions the opacity of which is equal to or greater than twenty (20) percent except for one six minute period per hour of not more than 27 percent opacity.

4. No person shall cause, let, permit, suffer or allow the emission of nitrogen oxides (NO_x), reported as nitrogen dioxide, from any fuel-burning equipment equal to or greater than 250 million BTU per hour of heat input that is constructed or extensviely modified after January 1, 1972, equal to or exceeding the following:

   (i) when firing coal - 0/7 pounds of NO_x per million BTU's of heat input;

   (ii) when firing oil - 0.3 pounds of NO_x per million BTU's of heat input;

   (iii) when firing gas - 0.2 pounds of NO_x per million BTU's of heat input;



MAXIMUM PERMISSIBLE EMISSION OF FLY ASH AND OTHER
PARTICULATE MATTER FROM FUEL BURNING INSTALLATIONS

FIGURE 1

(iv) when different fuels are burned simultaneously in any combination the applicable standard, expressed as pounds of NO_x per million BTU's of heat input, shall be determined by proration. Compliance shall be determined by using the following formula:

$$\frac{x(0.20) + y(0.30) + z(0.70)}{x + y + z}$$

where:

x = percent of total heat input derived from gaseous fuel;

y = percent of total heat input derived from oil;

z = percent of total heat input derived from coal.

(e) Particulate Emission from Manufacturing Processes:

1. Except as may be specified in other sections of this rule no person shall cause, let, permit, suffer, or allow the rate of emission from any source, particulate matter in total quantities equal to or exceeding the amounts shown in Table Ia or Ib. Equipment in operation, or under construction contract, on or before July 2, 1968, shall be considered existing equipment. All other equipment put in operation or extensively altered after said date is to be considered new equipment.

(i) The following equations shall be used to calculate the allowable rates of emsssion from new equipment and shall accompany Table Ia:

$E = 4.1\ P^{0.67}$; for process input weight rate above 30 tons per hour

$E = 55\ P^{0.11} - 40$; for process input weight rate above 30 tons per hour.

(ii) The following equation shall be used to calculate the allowable rates of emission from existing equipment and shall accompany Table Ib:

$E = 4.1\ P^{0.67}$

E = emission rate in pounds per hour

TABLE Ia

ALLOWABLE RATE OF EMISSION
BASED ON
PROCESS WEIGHT RATE ON NEW EQUIPMENT

Process Input Weight		Rate of Emission	Process Input Weight Rate		Rate of Emission
Lb/Hr	or Tons/Hr	Lb/Hr	Lb/Hr	or Tons/Hr	Lb/Hr
100	0.05	0.551	16,000	8	16.5
200	0.10	0.877	18,000	9	17.9
400	0.20	1.40	20,000	10	19.2
600	0.30	1.83	30,000	15	25.2
800	0.40	2.22	40,000	20	30.5
1,000	0.50	2.58	50,000	25	35.4
1,500	0.75	3.38	60,000	30	40.0
2,000	1.00	4.10	70,000	35	41.3
2,500	1.25	4.76	80,000	40	42.5
3,000	1.50	5.38	90,000	45	43.6
3,500	1.75	5.96	100,000	50	44.6
4,000	2.00	6.52	120,000	60	46.3
5,000	2.50	7.58	140,000	70	47.8
6,000	3.00	8.56	160,000	80	49.0
7,000	3.50	9.49	200,000	100	51.2
8,000	4.00	10.4	1,000,000	500	69.0
9,000	4.50	11.2	2,000,000	1,000	77.6
10,000	5.00	12.0	6,000,000	3,000	92.7
12,000	6.00	13.6			

TABLE Ib

ALLOWABLE RATE OF EMISSION

BASED ON

PROCESS WEIGHT RATE ON EXISTING EQUIPMENT

Process Input Weight Rate		Rate of Emission	Process Input Weight Rate		Rate of Emission
Lb/Hr	or Tons/Hr	Lb/Hr	Lb/Hr	or Tons/Hr	Lb/Hr
100	0.05	0.551	16,000	8	16.5
200	0.10	0.877	18,000	9	17.9
400	0.20	1.40	20,000	10	19.2
600	0.30	1.83	30,000	15	25.2
800	0.40	2.22	40,000	20	30.5
1,000	0.50	2.58	50,000	25	35.4
1,500	0.75	3.38	60,000	30	40.0
2,000	1.00	4.10	70,000	35	44.35
2,500	1.25	4.76	80,000	40	48.4
3,000	1.50	5.38	90,000	45	52.5
3,500	1.75	5.96	100,000	50	56.4
4,000	2.00	6.52	120,000	60	63.5
5,000	2.50	7.58	140,000	70	70.6
6,000	3.00	8.56	160,000	80	77.0
7,000	3.50	9.49	200,000	100	89.7
8,000	4.00	10.4	1,000,000	500	262
9,000	4.50	11.2	2,000,000	1,000	424
10,000	5.00	12.0	6,000,000	3,000	878
12,000	6.00	13.6			

To use Tables Ia and Ib, take the process input weight rate (Lb/Hr or Tons/Hr). Then find this figure on the table, opposite is the maximum number of pounds of contaminants which may be discharged into the atmosphere in any one hour.

P = process input weight rate in tons per hour.

Note: Section 391-3-1-.02(2)(e) is approved only to the extent that it provides for the establishment, as permit conditions, of emission limits more stringent than those otherwise applicable under the currently approved Georgia regulation.

(f) Fluorides:

1. Unit emissions of fluoride, expressed as pounds of fluoride ion per ton of P_2O_5 or equivalent, shall not exceed 0.4 pounds for a source in operation on or before January 1, 1972; and 0.2 pounds for all sources placed in operation or extensively altered after January 1, 1972. The allowable emission of fluorides shall be calculated by multiplying the unit emission specified above times the expressed design capacity of the source in question.

(g) Sulfur Dioxide:

1. No person shall cause, let, suffer, permit, or allow from any source the emission of sulfur dioxide (SO_2) equal to or exceeding

   (i) for stack height(s) less than 300 feet -

   $S = 4{,}000F \left(\frac{hs}{300}\right)^3$, in pounds per hour;

   (ii) for stacks 300 feet or greater in height -

   $S = 4{,}000F \left(\frac{hs}{300}\right)^2$, in pounds per hour;

   (iii) F = 0.8, when 2 or more fuel-burning sources each having a heat imput of more than 500 million BTU's per hour and burning fuel containing more than 1 percent sulfur by weight are located in an urban area;

   (iv) F = 1, for other fuel-burning sources located in an urban area, and for all other kinds of sources emitting sulfer dioxide regardless of location;

   (v) F = 2, for fuel-burning sources having a heat input less than 10,000 million BTU's per hour, and located in a rural area;

   (vi) F = 3, for fuel-burning sources having a heat input equal to or greater than 10,000 million BTU's per hour, and located in a rural area;

   (vii) For the purposes of this section, the term "urban" shall mean any site located within or 5 miles from the limits of a city having a population of 50,000 or more; the term "rural" will apply to all other site locations.

(viii) h_s is the stack height in feet. If several stacks are located at a given site, then the stack height to be used above will be the weighted average stack height given by

$$h_s = \frac{h_1 S_1 + h_2 S_2 + \ldots h_n S_n}{S_{total}}$$

where h_1 is the height of the first stack, S_1 is the sulfur dioxide emitted from the first stack, h_2 is the height of the second stack, and so forth. S_{total} is the total sulfur dioxide emission at the site. S is expressed in pounds per hour sulfur dioxide from a stack. No single stack may exceed the above allowed emission calculated using its own actual height.

2. New fuel-burning sources capable of firing fossil fuel(s) at a rate exceeding 250 million BTU's per hour heat input, constructed or extensively modified after January 1, 1972, may not emit sulfur dioxide equal to or exceeding:

(i) 0.8 pounds of sulfur dioxide per million BTU's of heat input derived from liquid fuel or derived from liquid fossil fuel and wood residue,

(ii) 1.2 pounds of sulfur dioxide per million BTU's of heat input derived from solid fossil fuel or derived from solid fossil fuel and wood residue,

(iii) When different fossil fuels are burned simultaneously in any combination, the applicable standard expressed as pounds of sulfur dioxide per million BTU's of heat input shall be determined by proration using the following formula:

$$a = \frac{y(0.80) + z(1.2)}{y + z}$$

where:

y = percent of total heat input derived from liquid fossil fuel,

z = percent of total heat input derived from solid fossil fuel,

a = the allowable emission in pounds per million BTU's.

3. In addition to the stipulations and limitations in paragraphs 1. and 2. of this subsection, all fuel burning sources below 100 million BTU's of heat input per hour shall not burn fuel containing more than 2.5 percent sulfur, by weight. All fuel burning sources having a heat input of 100 million BTU's per hour or greater shall not burn a fuel containing more than 3 percent sulfur, by weight.

4. Notwithstanding the limitations on sulfur content of fuels stated in paragraph 3. above, the Director may allow sulfur content greater than that allowed in paragraph 3. above, provided that the source utilizes sulfur dioxide removal and the sulfur dioxide emission does not exceed that allowed by paragraph 3. above, utilizing no sulfur dioxide removal.

(h) Portland Cement Plants:

See Section 391-3-1-.02(8) for applicable New Source Performance Standards.

(i) Nitric Acid Plants:

1. No person shall cause or allow the emission of nitrogen oxides (NO_x), expressed as nitrogen dioxide, from nitric acid plants equal to or exceeding:

    (i) for plants constructed before January 1, 1972: 25 pounds of NO_x, expressed as nitrogen dioxide, per ton of 100% acid produced;

(ii) for plants constructed after January 1, 1972: the applicable New Source Performance Standards of 391-3-1.02(8).

2. No person shall operate a nitric acid plant unless the plant is equipped with a continuous NO_x monitor and recorder or an alternate system approved by the Director.

(j) Sulfuric Acid Plants:

1. No person shall cause or allow the emission of sulfur dioxide (SO_2) and acid mist from sulfuric acid plants equal to or exceeding:

(i) For plants constructed before January 1, 1972, 27.0 pounds of SO_2, and 0.15 pounds of acid mist per ton of 100% acid produced;

(ii) For plants constructed or extensively modified after January 1, 1972, the applicable New Source Performance Standards of 391-3-1.02(8).

2. No person shall operate a sulfuric acid plant unless the plant is equipped with a continuous SO_2 monitor and recorder or an approved alternate system approved by the Director.

(k) Particulate Emission from Asphaltic Concrete Hot Mix Plants:

1. No person shall cause, let, suffer, permit, or allow the emission of particulate matter from an Asphaltic Concrete Hot Mix Plant equal to or exceeding amounts derived from the following formulas:

(i) For existing plants below 45 tons per hour input - $E = P$, pounds per hour;

(ii) For existing plants equal to or greater than 45 tons per hour input - $E = 10P^{0.4}$, pounds per hour;

(iii) For new plants below 125 tons per hour input - $E = 2.1\ P^{0.6}$. pounds per hour;

(iv) For new plants equal to or greater than 125 tons per hour input - $E = 14 P^{0.2}$, pounds per hour;

(v) E equals the allowable emission of particulate matter in pounds per hour. P equals the process input weight rate in tons per hour;

(vi) Equipment in operation, or under construction contract, on or before January 1, 1972, shall be considered existing equipment. All equipment constructed or extensively altered after said date shall be considered new.

2. The New Source Performance Standards of 391-3-1-.02(8) for such asphaltic concrete plants apply to all such plants commencing construction on or after the effective date of such standards.

(1) Conical Burners

1. No conical burners under construction or modified after January 1, 1972, shall be allowed to operate unless the burner is equipped with combustion controls acceptable to the Division to minimize smoke emissions. To assure that these controls are in good maintenance and satisfactorily controlling the combustion process, the flue gas exit temperature shall be monitored with a sensing and recording device acceptable to the Division. These devices shall be maintained in good working order. The recording charts shall be kept on file and made available to the Division upon request;

2. No person shall cause, let, suffer, permit, or allow visible emissions from any conical burner, the opacity of which is equal to or greater than 40 percent.

per standard dry cubic foot of flue gases, calculated to 12 percent carbon dioxide by volume for products of combustion.

(iii) The limitations as outlined in (2)(1)2. shall apply when the burner is operating at full load. The carbon dioxide produced by combustion of auxiliary fuels shall be excluded from the calculation to 12 percent CO_2.

(n) Fugitive Dust:

1. All persons responsible for any operation, process, handling, transportation or storage facility which may result in fugitive dust shall take all reasonable precautions to prevent such dust from becoming airborne. Some reasonable precautions which could be taken to prevent dust from becoming airborne include, but are not limited to, the following:

    (i) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;

    (ii) Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts;

    (iii) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods can be employed during sandblasting or other similar operations;

    (iv) Covering, at all times when in motion, open bodied trucks, transporting materials likely to give rise to airborne dusts;

    (v) The prompt removal of earth or other material from paved streets onto which earth or other material has been deposited.

2. The percent opacity from any fugitive dust source listed in paragraph (2)(n)1. above shall not equal or exceed 20 percent.

(o) Cupola Furnaces for Metallurgical Melting:

1. The emissions of particulate matter from all new and existing ferrous foundry cupolas with an input process weight rate in excess of fifty thousand (50,000) pounds per hour shall no exceed the amounts determined from Table 1a and the accompanying equation of the Rules and Regulations.

2. The emission of particulate matter from all new and existing ferrous foundry cupolas with an input process weight rate less than fifty thousand (50,000) pounds per hour shall not exceed the amounts determined from Table 1c of the Rules and Regulations except as follows:

   (i) Any jobbing foundry which operates its cupola furnace or furnaces intermittently to melt ten (10) tons or less per 24 hour day shall be deemed in compliance if particulate emissions do not exceed six (6) pounds per ton of metal melted.

TABLE Ic

PARTICULATE EMISSIONS
FROM
FERROUS FOUNDRIES

Process Weight (lb/hr)	Maximum Weight Discharge (lb/hr)
1,000	3.05
2,000	4.70
3,000	6.35
4,000	8.00
5,000	9.58
6,000	11.30
7,000	12.90

Table Ic Continued

Process Weight (lb/hr)	Maximum Weight Discharge (lb/hr)
8,000	14.30
9,000	15.50
10,000	16.65
12,000	18.70
16,000	21.60
18,000	23.40
20,000	25.10
30,000	31.30
40,000	33.76
50,000	35.40

(p) Particulate Emissions from Kaolin and Fuller's Earth Processes:

1. The following equations shall be used to calculate the allowable rates of emission from Kaolin and Fuller's earth process equipment constructed or extensively modified after January 1, 1972, and shall accompany Table IIa:

   (i) $E = 3.59P^{0.62}$; for process input weight rate up to and including 30 tons per hour;

   (ii) $E = 17.31P^{0.16}$; for process input weight rate up to and including 30 tons per hour.

2. The following equation shall be used to calculate the allowable rates of emission from Kaolin and Fuller's earth process equipment constructed or put in operation on or before January 1, 1972, and shall accompany Table IIb:

   (i) $E = 4.1P^{0.67}$; for process input weight rate up to and including 30 tons per hour;

   (ii) $E = 55P^{0.11} - 40$; for process input weights rate above 30 tons per hour.

3. The combined particulate emissions from any Kaolin or Fuller's earth plant site shall not exceed 250 pounds per hour.

   E = allowable emission rate in pounds per hour;

   P = process input weight rate in tons per hour.

TABLE IIa

ALLOWABLE RATE OF EMISSIONS FROM KAOLIN AND FULLER'S EARTH PROCESSES ON NEW OR MODIFIED EQUIPMENT

Process Input Weight Rate (Lbs/Hr)	Rate of Emissions (Lbs/Hr)
50	0.03
100	0.55
500	1.53
1,000	2.25
5,000	6.34
10,000	9.73
20,000	14.99
60,000	29.60
80,000	31.19
120,000	33.28
160,000	34.85
200,000	36.11
400,000	40.35
1,000,000	46.72

TABLE IIb

ALLOWABLE RATE OF EMISSION FROM KAOLIN AND FULLER'S EARTH PROCESSES ON EXISTING EQUIPMENT

Process Input Weight Rate		Rate of Emission
Lb/Hr	or Tons/Hr	Lb/Hr
100	0.05	0.551
200	0.10	0.877
400	0.20	1.40
600	0.30	1.83
800	0.40	2.22
1,000	0.50	2.58
1,500	0.75	3.38
2,000	1.00	4.10
2,500	1.25	4.76
3,000	1.50	5.38
3,500	1.75	5.96
4,000	2.00	6.52
5,000	2.50	7.58
6,000	3.00	8.56
7,000	3.50	9.49
8,000	4.00	10.4
9,000	4.50	11.2
10,000	5.00	12.0
12,000	6.00	13.6
16,000	8	16.5
18,000	9	17.9
20,000	10	19.2
30,000	15	25.2
40,000	20	30.5
50,000	25	35.4
60,000	30	40.0
70,000	35	41.3
80,000	40	42.5
90,000	45	43.6
100,000	50	44.6
120,000	60	46.3
140,000	70	47.8
160,000	80	49.0
200,000	100	51.2
1,000,000	500	69.0
2,000,000	1,000	77.6
6,000,000	3,000	92.7

(q) Particulate Emissions from Cotton Gins.

1. The emission of particulate matter from any cotton ginning operation shall not exceed the amounts determined from Table IIIa and the accompanying equation of the Rules and Regulations.

   (i) The following equation shall be used to calculate the allowable rates of emission and shall accompany Table IIIa:

   $E = 7\ B^{0.5}$

   E = allowable emission rate in pounds per hour

   B = number of standard bales per hour. A standard bale is defined as a finished bale weighing 500 pounds.

TABLE IIIa

PARTICULATE EMISSION

FROM COTTON GINS

No. of Bales/Hr.	Allowable-lbs/Hr.
1	7.00
2	9.90
3	12.12
4	14.00
5	15.65
6	17.15
7	18.52
8	19.80
9	21.00
10	22.14
11	23.22
12	24.25
13	25.24
14	26.19
15	27.11
16	28.00
17	28.86
18	29.69
19	30.51
20	31.30

(r) Particulate Emissions from Granular and Mixed Fertilizer Manufacturing Units.

1. For the purpose of this regulation the ammoniator, dryer, cooler and associated equipment will be considered one unit.

2. The following equations shall be used to calculate the allowable rates of emission from granular and mixed fertilizer manufacturing units:

   (i) $E = 3.59\ P^{0.62}$; for production rates up to and including 30 tons per hour;

   (ii) $E = 17.31\ P^{0.16}$; for production rates above 30 tons per hour;

   E = allowable emission rate in pounds per hour;

   P = production rate of finished product in tons per hour. Recycle will not be included.

(s) Nitrogen Oxides

1. No person shall cause or allow from any source, except fuel burning equipment, the emission of nitrogen oxides (NO_x), expressed as nitrogen dioxide, equal to or exceeding:

   (i) for stack height (s) less than 300 feet -

   $$N = 9{,}300 \left(\frac{hs}{300}\right)^3 \text{, in pounds per hour;}$$

   (ii) for stacks 300 feet or greater in height -

   $$N = 9{,}300 \left(\frac{hs}{300}\right)^2 \text{, in pounds per hour;}$$

   (iii) hs is the stack height in feet. If several stacks are located at a given site, then the stack height to be used above will be the weighted average stack height given by

   $$hs = \frac{h_1N_1 + h_2N_2 + \ldots\ h_nN_n}{N_{total}}$$

   where h_1 is the height of the first stack, N_1 is the NO_x emitted from the first stack, and so forth. N_{total} is the total NO_x emission at the site. N is expressed in pounds per hour NOx from a stack. No single stack may exceed the above allowed emission calculated using its own actual height.

(t)* VOC Emissions from Automobile and Light Duty Truck Manufacturing:

1. No person shall cause, let, permit, suffer, or allow the emissions of VOC from automobile and/or light duty truck manufacturing facilities to exceed:

   (i) 2.1 pounds per gallon, excluding water, delivered to the applicator from prime application, flashoff area and oven operations;

   (ii) 2.8 pounds per gallon, excluding water, delivered to the applicator from topcoat application, flashoff area and oven operations;

   (iii) 4.8 pounds per gallon, excluding water, delivered to the applicator from final repair application, flashoff area and oven operations.

2. the emission limits in this subsection shall be achieved by:

   (i) the application of low solvent content coating technology; or,

   (ii) incineration, with a capture system approved by the Director, provided that 90 percent of the nonmethane volatile organic compounds (VOC measured as total combustible carbon) which enter the incinerator are oxidized to carbon dioxide and water; or,

   (iii) a system demonstrated to have control efficiency equivalent to or greater than required in (i) or (ii) of this paragraph, including improved transfer efficiency, and approved by the Director.

3. for the purpose of this subsection, the following definitions apply:

   (i) "Application area" means the area where the coating is applied by dipping or spraying;

---

*Alternate compliance schedules for General Motors automotive assembly plants in Atlanta and Doraville, and the Ford Motor Co. assmebly plant in Hapeville. See Non Compliance schedule, Federal Register Publication 5/22/81.

(ii) "Manufacturing plant" means a facility which assembles twenty (20) or more automobile or light duty trucks per day (either separately or in combination) ready for sale or vehicle dealers. Customizers, body shops and other repainters are not part of this definition;

(iii) "Automobile" means all passenger cars or passenger car derivatives capable of seating a maximum of 12 or fewer passengers;

(iv) "Light-duty trucks" means any motor vehicles rated 8500 pounds gross weight or less which are designed primarily for purpose of transportation or are derivatives of such vehicles.

4. The emission limits contained in this subsection shall apply to all automobile and light duty truck manufacturing facilities located in those areas of the state designated by the Director, and to all such facilities elsewhere in the state which have a potential to emit 100 tons per year of VOC.

(u) VOC Emission from Can Coating:

1. No person shall cause, let, permit, suffer, or allow the emissions of VOC from can coating operations to exceed:

(i) 2.8 pounds per gallon, excluding water, delivered to the coating applicator from sheet basecoat (exterior and interior) and overvarnish or two-piece can exterior (basecoat and overvarnish) operations;

(ii) 4.2 pounds per gallon, excluding water, delivered to the coating applicator from two and three-piece can interior body spray and two-piece can exterior end (spray or roll coat) operations;

(iii) 5.5 pounds per gallon, excluding water, delivered to the coating applicator from three-piece can side-seam spray operations;

(iv) 3.7 pounds per gallon, excluding water, delivered to the coating applicator from end seal compound operations.

2. The emission limits in this subsection shall be achieved by:

   (i) the application of low solvent content coating technology; or,

   (ii) incineration, with a capture system approved by the Director, provided that 90 percent of the nonmethane volatile organic compounds (VOC measured as total combustible carbon) which enter the incinerator are oxidized to carbon dioxide and water; or,

   (iii) a system demonstrated to have control efficiency equivalent to or greater than required in (i) or (ii) of this paragraph, and approved by the Director.

3. For the purpose of this subsection, the following definitions apply:

   (i) "End sealing compound" means a synthetic rubber compound which is coated onto can ends and which functions as a gasket when the end is assembled on the can;

   (ii) "Exterior base coating" means a coating applied to the exterior protection to the metal and to provide background for the lithographic or printing operation;

   (iii) "Interior base coating" means a coating applied by roller coater or spray to the interior of a can to provide a protective lining between the can metal and product;

   (iv) "Interior body spray" means a coating sprayed on the interior of the interior of the can body to provide a protective film between the product and the can;

   (v) "Overvarnish" means a coating applied directly over ink to reduce the coefficient of friction, and to provide gloss and to protect the finish against abrasion and corrosion;

(vi) "Three-piece can side-seam spray" means a coating sprayed on the exterior and interior of a welded, cemented or soldered seam to protect the exposed metal;

(vii) "Two-piece can exterior end coating" means a coating applied by roller coating or spraying to the exterior end of of a can to provide protection to the metal.

4. The emission limits contained in this paragraph shall apply to all can coating operations located in those areas of the state designated by the Director, and to all such facilities elsewhere in the State which have a potential to emit 100 tons per year of VOC.

(v) VOC Emissions from Coil Coating:

1. No person shall cause, let, permit suffer, or allow the emissions of VOC from coil coating operations to exceed:

(i) 2.6 pounds per gallon, excluding water, delivered to the coating applicator from prime and topcoat or single coat operations;

(ii) The emission limits in this subsection shall apply to the coating applicator(s), oven(s) and quench area(s) of coil coating lines involved in prime and topcoat or single coat operations.

2. The emission limits in this subsection shall be achieved by:

(i) the application of low solvent content coating technology; or,

(ii) incineration, with a capture system approved by the Director, provided that 90 percent of the nonmethane volatile organic compounds (VOC measured as total combustible carbon) which enter the incinerator are oxidized to carbon dioxide and water; or,

(iii) a system demonstrated to have control efficiency equivalent to or greater than required in (i) or (ii) of this paragraph, and approved by the Director.

3. For the purpose of this subsection, the following definitions apply.

   (i) "Coil coating" means the coating of any flat metal sheet or strip that comes in rolls or coils;

   (ii) "Quench area" means a chamber where the hot metal exiting the oven is cooled by either a spray of water or a blast of air followed by water cooling.

4. The emission limits contained in this subsection shall apply to all coil coating operations located in those areas of the state designated by the Director, and to all such facilities elsewhere in the State which have a potential to emit 100 tons per year of VOC.

(w) VOC Emissions from Paper Coating:

1. No person shall cause, let, permit, suffer, or allow the emissions of VOC from paper coating operations to exceed:

   (i) 2.9 pounds per gallon, excluding water, delivered to the coating applicator from a paper coating line. This limit shall apply to roll, knife or rotogravure coater(s) and drying oven(s) of paper coating.

2. The emissions limits in this subsection shall be achieved by:

   (i) the application of low solvent content technology; or,

   (ii) incineration, with a capture system approved by the Director, provided that 90 percent of the nonmethane volatile organic compounds (VOC measured as total combustible carbon) which enter the incinerator are oxidized to carbon dioxide and water; or,

   (iii) a system demonstrated to have control efficiency equivalent to or greater than required in (i) or (ii) of this paragraph, and approved by the Director.

3. For the purpose of this subsection, the following definitions apply.

   (i) "Knife coating" means the application of a coating material to a substrate by means of drawing the substrate beneath a knife that spreads the coating evenly over the full width of the substrate;

   (ii) "Paper coating" means the application of a coating on paper and pressure sensitive tapes regardless of substrate in which the coating is distributed uniformly across the web;

   (iii) "Roll coating" means the application of a coating material to a substrate by means of hard rubber or steel rolls;

   (iv) "Rotogravure coating" means the application of a coating material to a substrate by means of a roll coating technique in which the pattern to be applied is etched on the coating roll. The coating material is picked up in these recessed areas and is transferred to the substrate.

4. The emission limits contained in this subsection shall apply to all paper coating operations located in those areas of the state designated by the Director, and to all such facilities elsewhere in the State which have a potential to emit 100 tons per year of VOC.

(x) VOC Emissions from Fabric and Vinyl Coating:

1. No person shall cause, let, permit, suffer, or allow the emission of VOC from fabric or vinyl coating oerations to exceed:

   (i) 2.9 pounds per gallon, excluding water, delivered to the coating applicator from fabric coating lines;

   (ii) 3.8 pounds per gallon, excluding water, delivered to the coating applicator from a vinyl coating line;

   (iii) The emission limits in this subsection shall apply to roll, knife or rotogravure coater(s) and drying oven(s) of fabric and vinyl coating lines.

2. the emission limits in this subsection shall be achieved by:

   (i) The application of low solvent content coating technology; or,

   (ii) incineration, with a capture system approved by the director, provided that 90 percent of the nonmethane volatile organic compounds (VOC measured as total combustible carbon) which enter the incinerator are oxidized to carbon dioxide and water; or,

   (iii) a system demonstrated to have control efficiency equivalent to or greater than required in (i) or (ii) of this paragraph, and approved by the Director.

3. For the purpose of this subsection, the following definitions apply.

   (i) "Fabric coating" means the coating of a textile substrate with a knife, roll, or rotogravure coater to impart properties that are not initially present, such as strength, stability, water or acid repellancy, or appearance;

   (ii) "Knife coating" means the application of a coating material to a substrate by means of drawing the substrate beneath a knife that spreads the coating evenly over the full width of the substrate;

   (iii) "Roll coating" means the application of a coating material to a substrate by means of hard rubber or steel rolls;

   (iv) "Rotogravure coating" means the application of a coating material to a substrate by means of a roll coating technique in which the pattern to be applied is etched on the coating roll. The coating material is picked up in these recessed areas and is transferred to the substrate;

   (v) "Vinyl coating" means applying a decorative or protective topcoat, or printing on vinyl coated fabric or vinyl sheets.

4. The emission limits contained in this subsectin shall apply to all fabric and vinyl coating operations located in these areas of the state designated by the Director, and to all such facilities elsewhere in the State which have a potential to emit 100 tons per year of VOC.

(y) VOC Emissions from Metal Furniture Coating:

1. No person shall cause, let permit, suffer, or allow the emissions of VOC from metal furniture coating operations to exceed:

    (i) 3.0 pounds per gallon, excluding water, delivered to the coating applicator from prime and topcoat of single coat operations;

    (ii) The emission limit in this subsection shall apply to the application area(s), flashoff area(s) and oven(s) of metal furniture coating lines involved in prime and topcoat or single coat operations.

2. The emissions limit in this subsection shall be achieved by:

    (i) the application of low solvent content coating technology; or,

    (ii) incineration, with a capture system approved by the Director, provided that 90 percent of the nonmethane volatile organic compounds (VOC measured as total combustible carbon) which enter the incinerator are oxidized to carbon dioxide and water; or,

    (iii) a system demonstrated to have control efficiency equivalent to or greater than required in (i) and (ii) of this paragraph, and approved by the Director.

3. For the purpose of this subsection, the following definitions apply:

    (i) "Application area" means the area where the coating is applied by spraying, dipping or flowcoating tehcniques;

(ii) "Metal furniture coating" means the surface coating of any furniture made of metal or any metal part which will be assembled with other metal, wood, fabric, plastic or glass parts to form a furniture piece.

4. The emission limits contained in this subsection shall apply to all metal furniture coating operations located in those areas of the state designated by the Director, and to all such facilities elsewhere in the State which have a potential to emit 100 tons per year year of VOC.

(z) VOC Emissions from Large Appliance Surface Coating:

1. No person shall cause, let, permit suffer, or allow the emissions of VOC from the surface coating of large appliances to exceed:

   (i) 2.8 pounds per gallon, excluding water, delivered to the coating applicator from prime, single or topcoat operations;

   (ii) The emission limit in this subsection shall apply to the application area(s), flashoff areas(s), and oven(s) of large appliance coating line involved in prime, single or topcoat coating operations;

   (iii) The emission limit in this subsection shall not apply to the use of quick-drying lacquers used for repair of scratches and nicks.

2. The emission limit in this subsection shall by achieved by:

   (i) the application of low solvent content coating technology; or,

   (ii) incineration, with a capture system approved by the Director, provided that 90 percent of the nonmethane volatile organic compounds (VOC measured as total combustible carbon) which enter the incinerator are oxidized to carbon dioxide and water; or,

   (iii) a system demonstrated to have control efficiency equivalent to or greater than required in (i) or (ii) of this paragraph, and approved by the Director.

3. For the purpose of this subsection, the following definitions apply:

   (i) "Application area" means the area where the coating is applied by spraying, dipping or flowcoating techniques;

   (ii) "Single coat" means a single film of coating applied directly to the metal substrate omitting the primer application;

   (iii) "Large appliances" means doors, cases, lids, panels and interior support parts of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners and other similar products.

4. The emission limits contained in this subsection shall apply to all large appliance surface coating operations located in those areas of the state designated by the Director, and to all such facilities elsewhere in the State which have a potential to emit 100 tons per year of VOC.

(aa) VOC Emissions from Wire Coating:

1. No person shall cause, let, permit, suffer, or allow the emission of VOC from wire coating operations to exceed:

   (i) 1.7 pounds per gallon, excluding water, delivered to the coating applicator from wire coating operations;

   (ii) The emission limit in this subsection shall apply to the oven(s) of wire coating operations.

2. The emission limits in this subsection shall be achieved by:

   (i) the application of low solvent content coating technology; or,

   (ii) incineration, with a capture system approved by the Director, provided that 90 percent of the nonmethane volatile organic compound (VOC measured as total combustible carbon) which enter the incinerator are oxidized to carbon dioxide and water; or,

(iii) a system demonstrated to have control efficiency equivalent to or greater than required in (i) or (ii) of this paragraph, and approved by the Director.

3. For the purpose of this subsection, the following definitions apply:

(i) "Wire Coating" means the process of applying a coating of electrically insulating varnish or enamel to aluminum or copper wire for use in electrical machinery.

4. The emission limits contained in this subsection shall apply to all wire coating operations located in those counties designated by the Director, and to all such facilities elsewhere in the State which have potential to emit 100 tons per year of VOC.

(bb) Petroleum Liquid Storage:

1. No person shall cause, let, permit, suffer, or allow the use of a fixed roof storage vessel with capacities of 40,000 gallons or greater containing a volatile petroleum liquid where true vapor pressure is greater than 1.52 psia unless:

(i) the vessel has been fitted with a floating roof; or,

(ii) the vessel has been fitted with an equally effective alternative control approved by the Director.

2. The requirements of this subsection shall not apply to vessels:

(i) underground, if the total volume of petroleum liquids added to and taken from the tank annually does not exceed twice the volume of the tank; or,

(ii) having capacities less than 425,000 gallons used to store crude oil prior to lease custody transfer.

3. For the purpose of this subsection, the following definitions shall apply:

   (i) "Crude oil" means a naturally occuring mixture which consists of hydrocarbons and/or sulfur, nitrogen and/or oxygen derivatives of hydrocarbons and which is a liquid at standard conditions;

   (ii) "Floating roof" means a storage vessel cover consisting of a double deck, pontoon single deck, internal floating cover or covered floating roof, which rests upon and is supported by the petroleum liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank wall;

   (iii) "Petroleum liquids" means crude oil, condensate, and any finished or intermediate products manufactured in a petroleum refinery;

   (iv) "Petroleum refinery" means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of crude oils, or through redistillation, cracking, extraction, or reforming of unfinished petroleum derivatives;

   (v) "True vapor pressure" means the equilibrium partial pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institued bulletin 2517, "Evaporation Loss from Floating Roof Tanks," 1962.

4. The emission limits contained in this subsection shall apply to all petroleum liquid storage operations located in those areas of the state designated by the Director, and to all such facilities elsewhere in the State which have a potential to emit 100 tons per year of VOC.

(cc) Bulk Gasoline Plants:

1. No owner or operator of a bulk gasoline plant

may permit the receiving or dispensing of gasoline by its stationary storage tanks unless each tank is equipped with a vapor balance system as described under paragraph 4. of this section and approved by the Director; and,

(i) each tank is equipped with a submerged fill pipe, approved by the Director; or

(ii) each tank is equipped with a fill line whose discharge opening is near the tank bottom.

2. No owner or operator of a bulk gasoline plant, nor the owner or operator of a tank truck or trailer of more than 3000 gallons capacity may permit the loading or unloading of tank trucks or trailers at a bulk gasoline plant unless each tank truck or trailer is equipped with a vapor balance system as described under paragraph 4. of this section and approved by the Director; and,

(i) equipment is available at the bulk gasoline plant to provide for the submerged filling of each tank truck or trailer; or,

(ii) each tank truck or trailer is equipped for bottom filling.

3. No owner or operator of a bulk gasoline plant, or the owner or operator of a tank truck or trailer and stationary storage tank unless:

(i) the transfer is conducted in accordance with paragraphs 1. and 2. of this subsection; and,

(ii) the vapor balance system is in good working order and is connected and operating; and,

(iii) tank truck or trailer hatches are sealed to prevent the escape of vapors and gases during loading operations; and,

(iv) The tank trucks' or trailers' pressure/vacuum relief valves and hatch covers, and the truck tanks or storage tanks or associated vapor and liquid lines are to be in good working order, and without visible leaks; and,

(v) a means is provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected; and,

(vi) the pressure relief valves on storage vessels and tank trucks or trailers are set to release at 0.7 psig or greater unless restricted by state or local fire codes or the National Fire Prevention Association guidelines in which case the pressure relief valve must be set to release at the highest possible pressure allowed by these codes or guidelines.

4. Vapor balance systems required under paragraph 1. and 2. of this subsection shall consist of the following major components:

(i) a vapor space connnection on the stationary storage tank equipped with fittings which are vapor tight and will automatically and immediately close upon disconnection so as to prevent release of gasoline or gasoline vapors; and,

(ii) a connecting pipe or hose equipped with fittings which are vapor tight and will automatically and immediately close upon disconnection so as to prevent release of gasoline or gasoline vapors; and,

(iii) a vapor space connection on the tank truck or trailer equipped with fittings which are vapor tight and will automatically and immediately close upon disconnection so as to prevent release of gasoline or gasoline vapors or, a a loading arm with a vapor return line and hatch seal designed to prevent the escape of gasoline or gasoline vapors while loading.

5. No owner or operator of a bulk gasoline plant may permit gasoline to be spilled, discarded in sewers, stored in open containers or handled in any other manner that would result

in evaporation into the atmosphere.

6. The requirements of this subsection shall not apply to stationary storage tanks of less than 600 gallons.

7. For the purpose of this subsection, the following definitions shall apply:

   (i) "Bottom filling" means the fillng of a tank truck or stationary storage tank through an opening that is located at the tank bottom;

   (ii) "Bulk gasoline plant" means a gasoline storage and distribution facility which receives more than 125,000 gallons per month of gasoline from bulk terminals by trailer transport, stores it in tanks, and subsequently dispenses it via account truck to local farms, businesses, and service stations;

   (iii) "Bulk gasoline terminal" means a gasoline storage facility which receives gasoline from refineries primarily by pipeline, ship, or barge, and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck;

   (iv) "Gasoline" means any petroleum distillate having a Reid vapor pressure of 4 psia or greater;

   (v) "Splash filling" means the filling of a tank truck or stationary storage tank through a pipe or hose whose discharge opening is above the surface level of the liquid in the tank being filled;

   (vi) "Submerged filling" means the filling of a tank truck or stationary tank through a pipe or hose whose discharge opening is not more than six inches from the tank bottom;

   (vii) "Vapor balance system" means a combination of pipes or hoses which creates a closed system between the vapor spaces of an unloading tank and a receiving tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded.

8. The emission limits contained in this subsection shall apply to all bulk gasoline plants located in those areas of the state designated by the Director.

(dd) Bulk Gasoline Terminals:

1. No person may load gasoline into any tank trucks or trailers of more than 3000 gallons capacity from any bulk gasoline terminal unless;

   (i) The bulk of gasoline terminal is equipped with a vapor control system capable of complying with subparagraph 1.(v) of this paragraph 1., properly installed, in good working order, in operation, and consisting of one of the following;

      (A) An adsorber or condensation system which processes and recovers at least 90 percent of all vapors and gases from the equipment being controlled; or,

      (B) A vapor collection system which directs all vapors to a fuel gas system; or,

      (C) A system approved by the Director; and,

   (ii) All displaced vapors and gases are vented only to the vapor control system; and,

   (iii) Complete drainage of any loading arm will be accomplished before it is removed from the tank; and,

   (iv) All loading and vapor lines are equipped with fittings which make vapor-tight connections and which close automatically when disconnected, or a loading arm with vapor return line and hatch seal designed to prevent the escape of gases and vapors while loading.

   (v) Sources and persons affected under this subsection may not allow mass emissions of volatile organic compounds from control equipment to exceed 4.7 grains per gallon of gasoline loaded.

2. For the purpose of this subsection, the following definitions apply;

   (i) "Bulk gasoline terminal" means a gasoline storage facility which receives gasoline from refineries primarily by pipeline, ship, or barge, and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck.

   (ii) "Gasoline" means a pertroleum distillate having a Reid vapor pressure of 4 psia or greater.

3. The emission limits contained in this subsection shall apply to all bulk gasoline plants located in those areas of the State designated by the Director, and to all such facilities elsewhere in the State which have a potential to emit 100 tons per year of VOC.

(ee) Gasoline Dispensing Facility - Stage I

1. Except as allowed by paragraph 4 below, no person may transfer or cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank of greater than 2000 gallons, unless the tank is equipped with a submerged fill pipe and the vapors displaced from the storage tank during filling are controlled by one of the following:

   (i) A vapor-tight line from the storage tank to the delivery vessel and a system that will ensure the vapor line is connected before gasoline can be transferred into the tank; or,

   (ii) A refrigeration - condensation system or equivalent is utilized and recovers at least 90 percent by weight of the organic compounds in the displaced vapor; or,

   (iii) A system demonstrated to have control efficiency equivalent to or greater than provided in subparagraph 1.(i) or 1.(ii) of this paragraph approved by the Director.

2. The vapor-laden delivery vessel shall be sub-

ject to the following conditions;

(i) The delivery vessel must be designed and maintained to be vapor tight except for pressure relief under emergency conditions and for inspecting and gauging during periods when the vessel compartment is not being loaded or emptied.

3. For the purpose of this subsection, the following definitions shall apply:

(i) "Gasoline" means a petroleum distillate having a Reid vapor pressure of 4 psia or greater.

(ii) "Delivery vessel" means tank trucks or trailers equipped with a storage tank and used for the transport of gasoline from sources of supply to stationary storage tanks of gasoline dispensing facilities;

(iii) "Submerged fill pipe" means any fill pipe with a discharge opening which is near the tank bottom;

(iv) "Gasoline dispensing facility" means any site where more than 10,500 gallons per month of gasoline is dispersed to motor vehicle gasoline tanks from stationary storage tanks.

4. The emission limits contained in this subsection shall apply to all gasoline dispensing facilities located in those areas of the State designated by the Director except that any gasoline dispensing facility receiving all of its gasoline from suppliers other than those affected by subsections 391-3-1-.02(2)(cc) or 391-3-1-.02(2)(dd) shall also be exempt from this subsection.

(ff) Cutback asphalt:

1. After January 1, 1981, no person may cause, allow or permit the use of cutback asphalts for paving purposes except as necessary for:

(i) long-life stockpile storage; or,

(ii) the use or application at ambient temperatures less than 50 degrees F; or,

(iii) solely as a penetrating prime coat; or,

(iv) base stabilization.

2. For the purpose of this subsection, the following definitions shall apply:

   (i) "Asphalt" means a dark-brown to black cementitious material (solid, semisolid, or liquid in consistency) in which the predominating constituents are bitumens which occur in nature as such or which are obtained as residue in refining petroleum.

   (ii) "Cutback asphalt" means asphalt cement which has been liquified by blending with petroleum solvents (diluents). Upon exposure to atmospheric conditions the diluents evaporate, leaving the asphalt cement to perform its function.

   (iii) "Penetrating prime coat" means an application of low viscosity liquid asphalt to an absorbent surface. It is used to prepare an untreated base for an asphalt surface. The prime penetrates the base and plugs the voids, hardens the top, and helps bind it to the overlying asphalt course. It also reduces the necessity of maintaining an untreated base course prior to placing the asphalt pavement.

(gg) Petroleum Refinery:

1. Persons responsible for any vacuum producing system at a petroleum refinery shall control the emissions of any noncondensable volatile organic compound from the condensers, hot wells or accumulators by:

   (i) Piping the noncondensable vapors to a firebox or incinerator; or,

   (ii) Compressing the vapors and adding them to the refinery fuel gas; or,

   (iii) An equivalent method approved by the Director.

2. Persons responsible for any wastewater (oil/water) separator at a petroleum refinery

shall:

(i) Provide covers and seals approved by the Director, on all separators and forebays; and,

(ii) Equip all openings in covers, separators, and forebays with lids or seals such that the lids or seals are in the closed position at all times except when in actual use.

3. Before January 1, 1980 the owner or operator of any affected petroleum refinery located in this State shall develop and submit to the Director for approval a detailed procedure for minimization of volatile organic compound emissions during process unit turnaround. As a minimum, the procedure shall provide for;

   (i) Depressurization venting of the process unit or vessel to a vapor recovery system, flare or firebox; and,

   (ii) No emission of volatile organic compounds from a process unit or vessel unless its internal pressure is 19.7 psi or less.

4. For the purpose of this subsection, the following definitions shall apply:

   (i) "Accumulator" means the reservoir of a condensing unit receiving the condensate from the condenser.

   (ii) "Condenser" means any heat transfer device used to liquify vapors by removing their latent heats of vaporization. Such devices include, but are not limited to, shell and tube, coil, surface, or contact condensers.

   (iii) "Firebox" means the chamber or compartment of a boiler or furnace in which materials are burned but does not mean the combustion chamber of an incinerator.

   (iv) "Forebays" means the primary sections of a wastewater separator.

   (v) "Hot well" means the reservoir of a condensing unit receiving the warm condensate from the condenser.

(vi) "Petroleum refinery" means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation, cracking, extraction, or reforming of unfinished petroleum derivatives.

(vii) "Refinery fuel gas" means any gas which is generated by a petroleum refinery process unit and which is combusted, including any gaseous mixture of natural gas and fuel gas.

(viii) "Turnaround" means the procedure of shutting a refinery unit down after a run to do necessary maintenance and repair work and putting the unit back on stream.

(ix) "Vacuum producing system" means any reciprocating, rotary, or centrifugal blower or compressor, or any jet ejector or device that takes suction from a pressure below atmospheric and discharges against atmospheric pressure.

(x) "Vapor recovery system" means a system that prevents releases to the atmosphere of no less than 90 percent by weight of organic compounds emitted during the operation of any transfer, storage, or process equipment.

(xi) "Wastewater (oil/water) separator" means any device or piece of equipment which utilizes the difference in density between oil and water to remove oil and associated chemicals from water or any device, such as a flocculation tank, clarifier, etc., which removes petroleum derived compounds from wastewater.

5. The emission limits contained in this subsection shall apply to all petroleum refineries located in those areas of the State designated by the Director and to all such facilities elsewhere in the State which have a potential to emit 100 tons per year of VOC.

(hh) Solvent Metal Cleaning:

1. No person shall cause, suffer, allow or permit the operation of a cold cleaner degreaser unless the following requirements for control of emissions of the volatile organic compounds are satisfied;

   (i) The degreaser shall be equipped with a cover to prevent the escape of volatile organic compounds during periods of non-use.

   (ii) The degreaser shall be equipped with a facility for draining cleaned parts before removal.

   (iii) If used, the solvent spray must be a solid, fluid stream (not a fine, atomized or shower type spray) and at a pressure which does not cause excessive splashing.

   (iv) If the solvent volatility is 0.60 psi or greater measured at 100 degrees F, or if the solvent is heated above 120 degrees F, then one of the following control devices must be used:

      (A) Freeboard that gives a freeboard ratio of 0.7 or greater,

      (B) Water cover (solvent must be insoluble in and heavier than water),

      (C) Other systems of equivalent control, such as a refrigerated chiller or carbon adsorption.

   (v) Waste solvent shall be stored only in covered containers and shall not be disposed of by such a method as to allow excessive evaporation into the atmosphere.

2. No person shall cause, suffer, allow, or permit the operation of an open top vapor degreaser unless the following requirements for control of emissions of volatile organic compounds are satisfied:

   (i) The degreaser shall be equipped with a cover to prevent the escape of volatile organic compounds during periods of non-use.

(ii) The degreaser shall be equipped with one of the following control devices.

  (A) Freeboard ratio greater than or equal to 0.75;

  (B) Refrigerated chiller:

  (C) Enclosed design (cover or door opens only when the dry part is actually entering or exiting the degreaser);

  (D) Carbon adsorption system, with ventilation greater than 50 cfm/sq. ft. of air/vapor area (when cover is open), and exhausting less than 25 ppm solvent averaged over one complete adsorption cycle; or

  (E) Control system, demonstrated to have control efficiency, equivalent to or better than any of the above.

(iii) The degreaser shall be operated in accordance with the following procedures. Operating instructions summarizing these procedures shall be displayed on the degreaser.

  (A) Keep cover closed at all times except when processing work loads through the degreaser.

  (B) Minimize solvent carry-out by the following measures:

    (I) Rack parts to allow full drainage.

    (II) Degrease the work load in the vapor zone at least 30 seconds or until condensation ceases.

    (III) Tip out any pools of solvent on the cleaned parts before removal.

    (IV) Allow parts to dry within the degreaser for at least 15 seconds or until visually dry.

  (C) Do not degrease porous or adsorbent materials, such as cloth, leather, wood or rope.

(D) Work loads should not occupy more than half of the degreaser's open top area.

(E) The vapor level should not drop more than 4 inches when the work load enters the vapor zone.

(F) Never spray above the vapor level.

(G) Repair solvent leaks immediately, or shutdown the degreaser.

(H) Ventilation fans should not be used near the degreaser opening.

(I) Water should not be visually detectable in solvent exiting the water separator.

(iv) Waste solvent shall be stored only in covered containers and shall not be disposed of or transferred to another party by such a method as to allow excessive evaporation into the atmosphere.

3. No person shall cause, suffer, allow, or permit the operation of a conveyorized degreaser unless the following requirements for control of emissions of the volatile organic compounds is satisfied.

(i) The degreaser shall be equipped with a cover to prevent the escape of volatile organic compounds during periods of non-use.

(ii) The degreaser shall be equipped with either a drying tunnel, or another means such as rotating (tumbling) basket, sufficient to prevent cleaned parts from carrying out solvent liquid or vapor.

(iii) The degreaser shall be equipped with one of the following.

(A) Refrigerated chiller,

(B) Carbon adsorption system, with ventilation greater than 50 cfm per sq. ft. of air/vapor area (when down-time covers are open), and exhausting less than 25 ppm of solvent by volume averaged over a complete adsorption cycle, or

(C) System demonstrated to have control efficiency equivalent to or better than either of the above.

(iv) The degreaser shall be operated in accordance with the following procedure. Operating instructions summarizing these procedures shall be displayed on on the degreaser.

(A) Exhaust ventilation should not exceed 65 cfm per sq. ft. of degreaser opening, unless necessary to meet OSHA requirements. Work place fans should not be used near the degreaser opening.

(B) Minimize carry-out emissions by:

(I) Racking parts for best draninage.

(II) Maintaining vertical conveyor speed at less than 11 ft/min.

(C) Repair solvent leaks immediately, or shutdown the degreaser.

(D) Water should not visibly be detectable in the solvent exiting the water separator.

(E) Down-time cover must be placed over entrances and exits of conveyorized degreasers immediately after the conveyor and exhaust are shutdown and removed just before they are started up.

(v) Waste solvent shall be stored only in covered containers and shall not be disposed of or transferred to another party by such a method as to allow excessive evaporation into the atmosphere.

4. For the purpose of this subsection, the following definitions shall apply:

(i) "Cold cleaning" means the batch process of cleaning and removing soils from metal surfaces by spraying, brushing, flushing or immersion while maintaining the solvent below its boiling point. Wipe cleaning is not included in this definition.

(ii) "Conveyorized degreasing" means the continuous process of cleaning and removing soils from metal surfaces by operating with either cold or vaporized solvents.

(iii) "Freeboard height" means the distance from the top of vapor zone to the top of the degreaser tank.

(iv) "Freeboard ratio" means the freeboard height divided by the width (smallest dimension) of the degreaser.

(v) "Open top vapor degreasing" means the batch process of cleaning and removing soils from metal surfaces by condensing hot solvent vapor on the colder metal parts.

(vi) "Solvent metal cleaning" means the process of cleaning soils from metal surfaces by cold cleaning or open top vapor degreasing or conveyorized degreasing.

5. The emission limits contained in this subsection shall apply to all solvent metal cleaning operations located in those areas of the State designated by the Director, and to all such facilities elsewhere in the State which have a potential to emit 100 tons per year of VOC.

(3) Sampling:

(a) Any sampling, computation, and analysis to determine the compliance with any of the standards set forth herein shall be by methods and procedures approved by the Department prior to sampling.

(b) The owner or operator of any equipment which is being sampled for the purpose of determining compliance with the Regulations shall operate such equipment at the maximum expected operating capacity during the sampling period.

(c) The owner or operator of any source shall provide performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to such source;
2. Safe sampling platforms;
3. Safe access to sampling platforms;
4. Electric power for sampling and testing equipment.

(4) Ambient Air Standards:

(a) No person shall cause, suffer, permit or allow the emission from any source the quantities of compounds listed below which would cause the ambient air concentrations listed to be exceeded. This does not exempt such sources from controlling their emissions to a point equal to or lower than the levels required to comply with a specific emission standard enumerated in other sections of these Rules.

(b) Sulfur Dioxide:

1. The concentration of sulfur dioxide at ground level for any three hour period shall not exceed 1300 micrograms per cubic meter for more than one such three hour period per year.
2. The concentration of sulfur dioxide at ground level for any twenty-four hour period shall not exceed 365 micrograms per cubic meter for more than one such twenty-four hour period per year.
3. The annual arithmetic mean concentration of sulfur dioxide at ground level shall not exceed 80 micrograms per cubic meter.
4. Standard conditions for sulfur dioxide measurements shall be considered to be 25 degrees C and 760 mm. Hg. The specific standard procedure for measuring ambient air concentrations for all sulfur dioxide shall be West-Gaeke or equivalent method.

(c) Particulate Matter:

1. The concentration of particulate matter at ground level for any twenty-four hour period

shall not exceed 150 micrograms per cubic meter for more than one such twenty-four hour period per year.

2. The annual geometric mean concentration of particulate matter at ground level shall not exceed 75 micrograms per cubic meter.

3. The specific standard procedure for measuring particulate matter shall be high volume air sampling or equivalent method.

(d) Carbon Monoxide:

1. Carbon monoxide concentration, at ground level, shall not be allowed to exceed 40 milligrams per cubic meter for a one-hour average or 10.4 milligrams per cubic meter for an eight-hour average. Standard conditions for carbon monoxide measurements shall be considered to be 25 degrees C and 760 mm Hg.

2. The specified standard procedure for measuring ambient air concentrations of carbon monoxide shall be the non-dispersive infrared or equivalent method.

(e) Photochemical Oxidants:

1. The concentration of photochemical oxidants (ozone) at ground level for any one-hour period shall not exceed 160 micrograms per cubic meter for more than one such one-hour period per year. Standard conditions for photochemical oxidants (ozone) measurements shall be considered to be 25 degrees C and 760 mm. Hg.

2. The specific standard procedure for measuring ambient air concenrations of photochemical oxidants (ozone) shall be the Chemiluminescence or equivalent method.

(f) Lead

1. The mean concentration of lead at ground level shall not exceed 1.5 micrograms per cubic meter averaged over a calendar quarter.

2. The specified standard procedure for measuring ambient air concentrations of lead shall be those required to comply with Federal law or other Federal authority.

(g) Nitrogen Dioxide:

1. The annual arithmetic mean concentration of nitrogen dioxide at ground level shall not exceed 100 micrograms per cubic meter. Standard conditions for nitrogen dioxide measurements shall be considered to be 25°C and 760 mm. Hg.

2. The specified standard procedure for measuring ambient air concentrations of nitrogen dioxide shall be the Chemiluminescence or equivalent method.

(5) Open Burning:

(a) No person shall cause, suffer, allow, or permit open burning in any area of the state except as follows:

1. reduction of leaves on the premises on which they fall by the person in control of the premises, unless prohibited by local ordinance and/or regulation;

2. carrying out recognized agricultural procedures necessary for production or harvesting of crops;

3. destruction of combustible demolition, or construction materials either on site or transported to a burning facility approved by the Department, unless prohibited by local regulations;

4. supervised removal of undesirable growth from forest and woodlands;

5. for recreational purposes or cooking food for immediate human consumption;

6. fires set for purposes of training public fire-fighting personnel when authorized by the appropriate governmental entity and the guidelines set forth by the Department are strictly observed;

7. disposal of tree limbs, etc., resulting from storm damage;

8. for weed abatement, disease, and pest prevention;

9. operation of devices using open flame such as, tar kettles, blow torches, welding torches, portable heaters, and other flame making implements;

10. Setting and maintenance by contractors and tradesmen of miscellaneous small fires necessary in such activities as street-paving work installation or repair of utilities, provided that such fires are kept small in size, no smoke emissions exceed 40 percent opacity, and that local ordinances and regulations do not prohibit such actions.

11. open burning in other than predominantly residential areas for the purpose of landclearing for construction or right of way maintenance provided the following conditions are met:

    (i) Prevailing winds at the time of the burning are away from the major portion of the area's population;

    (ii) The location of the burning is at least 1,000 feet from any dwelling located in a predominantly residential area;

    (iii) The amount of dirt on or in the material being burned is minimized;

    (iv) Heavy oils, asphaltic materials, items containing natural or synthetic rubber, or any materials other than plant growth are not being burned;

    (v) No more than one pile 60' by 60' or equivalent is being burned within a 9 acre area at one time.

(b) In those counties whose total population, as listed in the latest U.S. Census, exceeds 65,000 the only legal exceptions of open burning shall be items 5., 6., 9., and 10. under section (5)(a) above, provided however, that if adequate disposal facilities for the particular combustible materials involved are not reasonably available, the other items under section (5)(a) shall also be permitted except that in no event shall the open burning of more than 100 cubic yards per day of material described in item 11 of section (5)(a) be permitted unless the person performing such burning shall have first given two days written notice of the time and place of such burning to the Department.

(c) A written notification to a person of a violation at one site shall be considered adequate notice of the Rules and Regulations and subsequently observed violations by the same person at the same or different site will result in immediate appropriate legal action by the Department.

(d) Except for a reasonable period to get a fire started, no smoke of a shade darker than a No. 2 of the Ringelmann Chart or equivalent opacity, shall be emitted by any source of open burning listed in sections (5)(a) and (b).

(e) During an air pollution episode declared by the proper authorities, no open burning of any kind shall be permitted unless open burning is required in the performance of an official duty of any public office if fire is necessary to thwart or prevent a hazard which cannot be properly managed by any other means or is necessary for the protection of public health.

(6) Source monitoring:

(a) Specific monitoring and reporting requirements for particular sources:

1. Sources, and owners and operators of sources, subject to any New Source Performance Standard of or pursuant to 42 U.S.C. section 7411, as amended, shall meet the monitoring and related requirements specified in the applicable New Source Performance Standard.

2. Existing sources; as herein designated, shall provide for the continuous monitoring of emissions as prescribed below:

(i) Fossil fuel-fired steam generators: The owner or operator of any fossil fuel-fired steam generator, except as provided for in subparagraph (iii) of this paragraph, with an annual average capacity factor of greater than 30%, as reported to the Federal Power commission for calendar year 1974, or as otherwise demonstrated to the Director by the owner or operator, shall install, calibrate, operate, and maintain all monitoring equipment necessary for the continuous monitoring of the following:

(I) Opacity, if such steam generator has a heat input greater than 250 million BTU's per hour, except where:

I. Gaseous fuel is the only fuel burned, or

II. Oil or mixture of gas and oil are the only fuels burned and the source is able to comply with the applicable particulate matter and opacity regulations without utilization of particulate matter collection equipment, and the source has never been found, through any administrative or judicial proceedings, to be in violation of any visible emission standard;

(II) Sulfur dioxide, if such steam generator has a heat input greater than 250 million BTU's per hour and has installed sulfur dioxide emission control equipment;

(III) The percent oxygen, or carbon dioxide, in the flue gas as necessary to accurately convert sulfur dioxide continuous emission monitoring data to units (pounds per hour) of the emission standard.

(ii) Sulfur acid plants:

The owner or operator of any sulfuric acid plant of greater than 300 tons per day production capacity, the production being expressed as 100 percent acid, shall, except as provided for in subparagraph (iv) of this paragraph, install, calibrate, maintain, and operate a continuous monitoring system for the measurement of sulfur dioxide for each sulfuric acid production facility within such plant.

(iii) Wood waste fired combination boilers:

(I) The owner or operator of any boiler which fires wood waste or wood waste in combination with fossil fuel(s) with a total heat input equal to or greater than

100 Million BTU's per hour shall, except as provided for in paragraph (iv) of this subsection, install, calibrate, operate, and maintain a continuous monitoring system for the measurement of opacity.

(II) Boilers subject to this subparagraph (iii) shall comply with the opacity monitoring requirements as specified for fossil fuel-fired steam generators. In any rule or subdivision thereof dealing with opacity monitoring requirements for fossil fuel-fired steam generators, where reference is made to "Fossil Fuel Fired Steam Generators" the term "Wood Waste Fired Combination Boilers" should be inserted for the purpose of this subparagraph.

(iv) Exemptions:

A facility is exempt from the requirements otherwise imposed by this paragraph (b)(4) if:

(I) It is subject to a New Source Performance Standard promulgated in 40 CFR, Part 60, pursuant to Section III of the Federal Act; or

(II) It is not subject to an applicable emission standard; or

(III) The source is scheduled for retirement by October 6, 1980 provided that the source will cease operation prior to such date and adequate provisions are made for monitoring if retirement does not occur as scheduled.

(v) Monitoring Equipment

(I) The monitoring equipment required pursuant to the previous subparagraph (i) through (iv) shall be demonstrated, except as provided by part (II) of this subparagraph, by the owners or operators of such monitoring equipment to meet the following performance specifications.

I. Continuous monitoring systems for measuring opacity shall comply with Performance Specification I of Appendix B to 40 CFR, Part 60, as amended.

II. Continuous monitoring systems for measuring sulfur dioxide shall comply with Performance Specification 2 of Appendix B to 40 CFR, Part 60, as amended.

III. Continuous monitoring systems for measuring oxygen shall comply with Performance Specification 3 of Appendix B to 40 CFR, Part 60, as amended.

IV. Continuous monitoring systems for measuring carbon dioxide shall comply with Performance Specification 3 of Appendix B to 40 CFR, Part 60, as amended.

(II) Any Source which has purchased an emission monitoring system(s) prior to September 11, 1974, is exempt from meeting the applicable test procedures prescribed in Appendix B of Part 60, as amended, for a period not to exceed five years from the effective date of this paragraph. Thereafter, the requirements of (v)(I) above apply.

(III) For sulfur dioxide monitoring systems installed on fossil fuel-fired steam generators or sulfuric acid plants, pursuant to subparagraphs 2.(i) and 2.(ii), respectively, the pollutant gas used to prepare calibration gas mixture shall be sulfur dioxide (SO2). Span and zero gases should be traceable to National Bureau of Standards and analyses of such gases shall be performed at times by methods prescribed by the Director.

(IV) Cycling times shall include the total time a monitoring system requires to sample, analyze, and record an emission measurement.

I. Continuous monitoring systems for measuring opacity shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 10-second period.

II. Continuous monitoring systems for measuring carbon dioxide, oxygen, or sulfur dioxide shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(V) The owner or operator of any continuous monitoring system required pursuant to this paragraph shall:

I. Record the zero and span drift in accordance with the method prescribed by the manufacturer of such instruments:

II. Subject the instruments to the manufacturer's recommended zero and span check at least once daily unless the manufacturer has recommended adjustments at shorter intervals, in such case such recommendations shall be followed:

III. Adjust the zero and span whenever the 24-hour zero drift or 24-hour calibration drift limits of the applicable performance specification in Appendix B of 40 CFR, Part 60, as amended, are exceeded; and

IV. Adjust continuous monitoring systems purchased or installed prior to September 11, 1974, whenever the 24-hour zero drift or 24-hour calibration drift exceed 10 percent of the emission standard.

(V) Instrument span shall be approximately 200 percent of the expected instrument data display output corresponding to the emission standard for the source.

(VI) The owner or operator of a source subject to this rule or regulation shall install the required continuous monitoring systems or monitoring devices such that representative measurements of emissions or process parameters (i.e. oxygen or carbon dioxide) from the affected facility are obtained.

(VII) When the emissions from two or more affected facilities of similar design and operating characteristics are combined before being released to the atmosphere, the owner or operator of a source subject to this paragraph (a)2. may install monitoring systems on the combined emissions. When the affected facilities are not of similar design and operating characteristics, or when the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator should establish alternative procedures to implement the intent of this requirement subject to approval by the Director.

(vi) Data Reporting:

The owner or operator of a facility subject to the requirements of this paragraph 2. shall submit a written report for each calendar quarter and, if excess emissions have occurred, the report shall state the nature and cause of the excess emissions, if known. The averaging period used for data reporting shall correspond to the averaging period specified in the emission test method used to determine compliance with an emission standard for the pollutant/source category in question. The required report shall include, as a minimum, the data specified in this subsection.

(I) For opacity measurements, the

summary shall consist of the magnitude in actual percent opacity of each six minute average of opacity which is reater than the opacity standard applicable to the source. If more than one opacity standard applies, excess emissions data must be submitted in relation to all such standards.

(II) For gaseous measurements the summary shall consist of emission averages in the units of the applicable standard, for each averaging period during which the applicable standard was exceeded.

(III) The data and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of system repairs or adjustments shall be reported. The Director may require proof of continuous monitoring system performance whenever system repairs or adjustments have been made.

(IV) When no excess emissions have occurred and the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be included in the report.

(V) The owners or operators of sources or facilities subject to this paragraph (a)2. shall maintain a file of all information reported in the quarterly summaries, and all other data collected either by the continuous monitoring system or as necessary to convert monitoring data to the units of the applicable standard for a minimum of two years from the date of collection of such data or submission of such summaries.

(vii) Data Conversion:

The owner or operator of a source subject to this paragraph (a)2. shall use the following procedures for converting monitoring data to units of the applicable standard:

(I) For fossil fuel-fired steam generators, the following procedures shall be used to convert gaseous emissions monitoring data in parts per million to lb/million BTU where necessary;

I. When the owner or operator of a fossil fuel-steam generator elects under Part (a)2.(i)(III) to measure oxygen on the flue gases, the measurements of the pollutant concentration and oxygen concentration shall each be on a dry basis and the following conversion procedure used:

$$E = C \frac{20.9}{20.9-\%O2}$$

II. When the owner or operator elects under Part (a)2.(i)(III) to measure carbon dioxide in the flue gases, the measurement of the pollutant concentration and the carbon dioxide concentration shall each be on a consistent basis (wet or dry) and the following conversion procedure used:

$$E = CFc \frac{100}{\%CO2}$$

III. The values used in the equation under subparts (vii)(I)I. and II. above of this subparagraph are derived as follows:

E = pollutant emissions, lb/million BTU.

C = pollutant concentration lb/dcf, determined by multiplying the average concentration (ppm) for each hourly period by 2.59 x 10to the -9 M lb/dscf per ppm where M = pollutant molecular weight, lb/lb-mole.

M = 64.07 for sulfur dioxide and 46.01 for oxides of nitrogen.

%O2, %CO2 = Oxygen or carbon dioxide volume (expressed as percent) determined with equipment specified under part (a)2.(i)(III) of this paragraph.

F, Fc = a factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted (F), and a factor representing a ratio of the volume of carbon dioxide generated to the calorific value of fuel combusted (Fc) respectively. Values of F and F are given in 40 CFR, Part 60, 45(f), as amended, as applicable.

(II) For sulfuric acid plants the owner or operator shall:

I. Establish a conversion factor three times daily according to the procedures of 40 CFR, Part 60.84(b) as amended;

II. Multiply the conversion factor by the average sulfur dioxide concentration in the flue gases to obtain average sulfur dioxide emissions in lb/short ton; and

III. Report the average sulfur dioxide emission for each averaging period in excess of the applicable emission standard in the quarterly summary.

(III) The owner or operator of a source subject to this regulation may employ data reporting or reduction procedures varying from those specified in this subparagraph

(a) 2. (vii) if such owner or operator shows to the satisfaction of the Director that such procedures are at least as accurate as the procedures identified in this subparagraph. Such procedures may include, but are not limited to the following:

I. Alternative procedures for computing emission averages that do not require integration of data (e.g., some facilities may demonstrate that the variability of their emissions is sufficiently small to allow accurate reduction of data based upon computing averages from equally spaced data points over the averaging period).

II. Alternative methods of converting pollutant concentration measurements of the units of the emission standards.

(viii) In cases where the owner or operator of a source subject to this paragraph wishes to utilize different, but equivalent, procedures for continuous monis and/or alternative monitoring and data reporting procedures or other alternative equivalents to comply with the intent of this paragraph then:

(I) The owner or operator must submit,

I. A detailed summary of the limitations prohibiting the installation of a continuous monitor and,

II. Alternative and/or equivalent emission monitoring and reporting requirements (e.g., periodic manual stack tests) to satisfy the intent of this paragraph.

(II) The use of any alternative or equivalent method for compliance with any requirement of this paragraph 0.2(6)(a)2. shall be subject to the approval of the Director.

(ix) Monitor Malfunction

The requirements of this paragraph shall not apply during any period of monitoring system malfunction, provided that the source owner or operator shows, to the satisfaction of the Director, that the malfunction was unavoidable and is being or was repaired as expeditiously as practicable.

(x) Implementation Period

The owner or operator of any source subject to this regulation:

(I) Shall complete the installation and performance tests of the equipment required by this paragraph and begin required monitoring and recording within 18 months from promulgation of this rule and regulation; but,

(II) May request an extension of time to install any monitor required by this paragraph, provided such owner or operator demonstrates to the satisfaction of the Director that good faith efforts have been made to obtain and install such devices within such prescribed timeframe.

(b) General monitoring and reporting requirements for all sources:

1. (i) Any person engaged in operations which cause emissions to be released into the atmosphere which may result in air pollution may be required to install, maintain, and use emission monitoring devices, to sample such specific emissions as prescribed by the Director; to make periodic reports on the nature and amounts of emissions and provide such other information as the Director may reasonably require; and to maintain such records as the Director may prescribe so as to determine whether emissions from such operations are in compliance with the provisions of this Act or any rules and regulations promulgated thereunder.

(ii) Specific types of information and/or equipment installation which may be requested may include, but are not limited to, the following items:

  (I) Photoelectric or other type smoke detector and recorders for continuous measurement and recording of smoke density emissions.

  (II) Sulfur contents of solid and liquid fuel, the determination of which shall be conducted in accordance with acceptable and appropriate American Society for Testing and Materials procedures.

  (III) Heating value and ash content of solid and liquid fuels.

  (IV) As technology permits, instrumentation for continuously monitoring particulate and gaseous emissions.

  (V) For incinerators, burning rates and hours of operation and monthly summaries of this information.

  (VI) Daily production and feed rates, daily hours of operation and monthly summaries of this information.

(iii) Records of information requested shall be submitted on forms supplied by the Director, or when forms are not supplied, in a format acceptable to and approved by the Director. The information obtained on request of the Director shall be retained for a period and shall be reported at time intervals to be specified. Records shall be kept current and be available for inspection at the discretion of the Director.

(iv) In the event of any malfunction or breakdown or process, fuel-burning, or emission control equipment for a period of four hours or more which results in excessive emissions for a major source, the owner or operator of such major source shall notify the Division by a written report which would describe the cause of the breakdown, the corrective actions taken, and the plans to prevent future occurances unless otherwise specified in a permit or order, the report must be submitted no later than seven (7) days after the occurrence. The information submitted shall be adequate to allow the Director to determine whether the excessive emissions were due to a sudden and unavoidable breakdown. The reporting requirements of this subparagraph (iv) shall be in addition to any other reporting requirement under these rules (Chapter 391-3-1), and such reporting shall in no event serve to excuse, otherwise justify or in any manner affect any potential liability or enforcement action.

(v) All data gathered in the process of enforcing this or other Air Quality Control Rule or Regulation shall be considered public information and shall be made available upon request, except such information which is required to be kept confidential by Ga. Code Ann. 43-2722, as amended.

(7) Prevention of Significant Deterioration of Air Quality.

(a) General Requirement:

1. The provisions of this subsection (7) shall apply to any source and the owner or operator of any source subject to any requirement under 40 Code of Federal Regulations (hereinafter, CFR), Part 52.21 as amended.

2. Definitions: For the purpose of this subsection, 40 CFR, Part 52.21(b) as amended, is hereby incorporated by reference.

(b) Prevention of Significant Deterioration Standards:

1. Ambient air increments: 40 CFR, Part 52.21(c), as amended, is hereby incorporated and adopted by reference.

2. Ambient air ceilings: 40 CFR, Part 52.21(d), as amended, is hereby incorporated and adopted by reference.

3. Restrictions on area classifications: 40 CFR, Part 52.21(e), as amended, is hereby incorporated and adopted by reference.

4. Stack heights: 40 CFR, Part 52.21(h), as amended is hereby incorporated and adopted by reference.

5. Review of major stationary sources and major modifications - source applicability and general exemptions: 40 CFR, Part 52.21(i) as amended, is hereby incorporated and adopted by reference.

6. Control technology review: 40 CFR, Part 52.21(j) as amended, is hereby incorporated and adopted by reference.

7. Exemptions from impact analysis: 40 CFR, Part 52.21(k) as amended, is hereby incorporated and adopted by reference.

8. Air quality review: 40 CFR, Part 52.21(l), as amended, is hereby incorporated and

adopted by reference.

9. Air quality models: 40 CFR, Part 52.21(m), as amended, is hereby incorporated and adopted by reference.

10. Monitoring: 40 CFR, Part 52.21(n), as amended, is hereby incorporated and adopted by reference.

11. Source information: 40 CFR, Part 52.21(o), as amended, is hereby incorporated and adopted by reference.

12. Additional impact analyses: 40 CFR, Part 52.21(p), as amended, is hereby incorporated and adopted by reference.

13. Class I area impact: 40 CFR, Part 52.21(q) as amended, is hereby incorporated and adoted by reference.

14. Public participation: 40 CFR, Part 52.21(r), as amended, is hereby incorporated and adopted by reference.

15. Source obligation: 40 CFR, Part 52.21(s), as amended, is hereby incorporated and adopted by reference.

(8) New Source Performance Standards:

(a) General Requirement: No person shall construct or operate any facility or source which fails to comply with the New Source Performance Standards contained in 40 Code of Federal Regulations (hereinafter, CFR), Part 60, as amended, including but not limited to (unless specifically excluded below), the subparts hereby adopted through incorporation by reference in paragraph (b) of this subsection.

(b) New Source Performance Standards:

1. General Provisions: For purposes of applying New Source Performance Standards, 40 CFR, Part 60, subpart A (excluding 60.4 and 60.9) is hereby incorporated and adopted by reference. The word "Administrator" as used in regulations adopted in this subsection shall mean the Director of EPD.

2. Standards of Performance for Fossil-Fuel

Fired Steam Generators: 40 CFR, Part 60, subpart D, as amended, are hereby incorporated and adopted by reference.

3. Standards of Performance for Incinerators: 40 CFR, Part 60, subpart E, as amended, is hereby incorporated and adopted by reference.

4. Standards of Performance for Portland Cement Plants: 40 CFR, Part 60, subpart F, as amended, is hereby incorporated and adopted by reference.

5. Standards of Performatnce for Nitric Acid Plants: 40 CFR, Part 60, subpart G, as amended, is hereby incorporated and adopted by reference.

6. Standards of Performance for Sulfuric Acid Plants: 40 CFR, Part 60, subpart H. as amended, is hereby incorporated and adopted by reference.

7. Standards of Performance for Asphalt Concrete Plants: 40 CFR, Part 60, subpart I, as amended, is hereby incorporated and adopted by reference.

8. Standards of Performance for Petroleum Refineries: 40 CFR, Part 60, subpart J, as amended, is hereby incorporated and adopted by reference.

9. Standards of Performance for Storage Vessels for Petroleum Liquids: 40 CFR, Part 60, subpart K, as amended, is hereby incorporated and adopted by reference.

10. Standards of Performance for Secondary Lead Smelters: 40 CFR, Part 60, subpart L, as amended, is hereby incorporated and adopted by reference.

11. Standards of Performance for Secondary Brass and Bronze Ingot Production Plants: 40 CFR, Part 70, subpart M, as amended, is hereby incorporated and adopted by reference.

12. Standards of Performance for Sewage Treatment Plants: 40 CFR, Part 60, subpart O, as amended, is hereby incorporated and adopted by reference.

13. Standards of Performance for Primary Lead Smelters: 40 CFR, Part 60, subpart R, as amended, is hereby incorporated and adopted by reference.

14. Standards of Performance for Primary Aluminum Reduction Plants: 40 CFR, Part 60, subpart S, as amended, is hereby incorporated and adopted by reference.

15. Standards of Performance for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants: 40 CFR, Part 60, subpart T, as amended, is hereby incorporated and adopted by reference.

16. Standards of Performance for the Phosphate Fertilizer Industry: Superphosphoric Acid Plants: 40 CFR, Part 60, subpart U, as amended, is hereby incorporated and adopted by reference.

17. Standards of Performance fo the Phosphate Fertilizer Industry: Diamonium Phosphate Plants: 40 CFR, Part 70, subpart V, as amended, is hereby incorporated by reference.

18. Standards of Performance for the Phosphate Fertilizer Industry: Triple Superphosphate Plants: 40 CFR, Part 70, subpart W, as amended, is hereby incorporated and adopted by reference.

19. Standards of Performance for the Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities: 40 CFR, Part 60, subpart X, as amended is hereby incorporated and adopted by reference.

20. Standards of Performance for Coal Preparation Plants: 40 CFR, Part 60, subpart Y, as amended, is hereby incorporated and adopted by reference.

21. Standards of Performance for Ferroalloy Production Facilities: 40 CFR, Part 60, subpart Z, as amended, is hereby incorporated and adopted by reference.

22. Standards of Performance for Steel Plants: Electric Arc Furnaces: 40 CFR, Part 60,

subpart AA, as amended, is hereby incorporated and adopted by reference.

23. Standards of Performance for Kraft Pulp Pulp Mills: 40 CFR, Part 60, subpart BB, as amended, is hereby incorporated and adopted by reference.

24. Standards of Performance for Grain Elevators: 40 CFR, Part 60, subpart DD, as amended, is hereby incorporated and adopted by reference.

25. Standards of Performance for Lime Manufacturing Plants: 40 CFR, Part 60, subpart HH, as amended, is hereby incorporated and adopted by reference.

(9) Emission Standards for Hazardous Air Pollutants.

(a) General Requirements:

1. The provisions of this subsection shall apply to any stationary source and to the owner or operator of any stationary source for which a standard is prescribed under 40 Code of Federal Regulations (hereinafter CFR), Part 61, including, but not limited to (unless specifically excluded below) the subparts hereby adopted through incorporation by reference in paragraph (b) of this subsection. For purposes of applying emission standards for hazardous air pollutants, 40 CFR, Part 61 (excluding 61.4 and 61.15), as amended, is hereby incorporated by reference. The word "Administrator" as used in regulations adopted in this subsection shall mean the Director of EPD.

(b) Emission Standards for Hazardous Air Pollutants:

1. Emission Standard for Asbestos: 40 CFR, Part 61, subpart B, as amended, is hereby incorporated and adopted by reference.

2. Emission Standard for Beryllium: 40 CFR, Part 61, subpart C, as amended, is hereby incorporated and adopted by reference.

3. Emission Standard for Beryllium Rocket Motor Firing: 40 CFR, Part 61, subpart D, as amended, is hereby incorporated and

adopted by reference.

4. Emission Standard for Mercury: 40 CFR, Part 61, subpart E, as amended, is hereby incorporated and adopted by reference.

5. Emission Standard for Vinyl chloride: 40 CFR, Part 61, subpart F, as amended, is hereby incorporated and adopted by reference.

391-3-1-.03 PERMITS.

(1) Construction Permit:

(a) Any person prior to beginning the construction or modification of any facility, which may result in air pollution, shall obtain a permit for the construction or modification of such facility, from the Department.

(b) The application for a construction permit shall be made on forms supplied by the Department, signed by the Applicant, and filed with the Department well in advance of any critical date involved in order that time will be available for review, discussion and revision where necessary. The application shall include, or be accompanied by, or both, all pertinent information as the Department may require for a full evaluation of the proposed construction or modification of facility, such as: processed flow diagrams; plot plans; description of control devices; description of the proposed new or modified operation; type of operation; raw materials and chemicals to be used; type, quantity, and heat output of fuels to be used; finished products; amount of combustible waste that will be generated and method of disposal, characteristics and amounts of emissions to atmosphere; engineering reports, plans and specifications; time schedules and reports of progress; records; and related information.

(c) The permit for the construction or modification shall be issued upon determination by the Department that the facility can reasonably be expected to meet all the provisions of Code Chapter 88-9 and any standards or rules and regulations promulgated by the Board.

(2) Operating Permit:

(a) Any person operating a facility from which air contaminants are or may be emitted must obtain a permit for such operation from the Director of the Environmental Protection Division of the Department of Natural Resources.

(b) Application for an operating permit must be made within thirty days after commencement of normal operations, or, in the case of an existing facility, within thirty days after this regulation becomes effective. The operation of an existing facility for which a proper permit application has been made shall not be interrupted pending final action on the permit by the Director of Environmental Protection Division.

(c) The application for an operating permit shall include the submission of such plans, specifications, and other information as deemed necessary by the Director to make full evaluation of the performance of the facility.

(d) An operating permit will be issued on evidence satisfactory to the Director of compliance with provisions of Code Chapter 88-9 (Ga. Laws 1967, p. 581, as amended) and the Rules and Regulations promulgated thereunder. The permit will specify the conditions under which the facility shall be operated in order to comply with the statute, rules and regulations. As a condition for the issuance of an operating permit, the Director may require the applicant to conduct performance tests and monitoring and reporting of operations to demonstrate compliance with the statute, rules and regulations. Such tests and monitoring shall be conducted in accordance with methods approved by the Director.

(e) The Director may grant a temporary operating permit for such period of time, and under such conditions as he shall specify in the permit, in order to allow the applicant a reasonable period of time to correct deficiencies in any existing facility. The temporary operating permit shall specify a schedule which will bring the existing facility into compliance with the statute, rules and regulations in the shortest practical time period.

(3) Revocation, suspension, modification or amendment of permits:

(a) Any permit issued by the Director shall be subject to periodic review and the Director may revoke, suspend, modify or amend any permit issued, for cause, including but not limited to, the following:

1. Violation of any condition of said permit, or failure to comply with a final order of the Director.

2. Failure to comply with any applicable rules or regulations in effect pursuant to this Chapter.

3. Obtaining a permit by misrepresentation, or failure to disclose fully all relevant facts, or failure to inform the Division of modifications affecting emissions;

4. Modifications which affect emissions.

In the event of modification, amendment, suspension or revocation of a permit, the Director shall serve written notice of such action on the permit holder and shall set forth in such notice the reason for the action.

(4) Permits Not Transferable. A permit is not transferable from one person to another person nor from one facility to another facility.

(5) Permits Public Records. Except as to information required to be kept confidential by Section 22 of the Act (Ga. Code Ann. 43-2722, as amended), all applications for construction permits and operating permits shall be public records.

(6) Exemptions. Permits under this rule to construct and operate new sources shall not be required for:

(a) Air conditioning or ventilating systems not designed to remove air contaminants generated by or released from such equipment;

(b) Fuel burning equipment burning only gas as a fuel and having a total heat input of 50 million BTU's per hour or less; or fuel burning equipment having a total heat input of 10 million BTU's per hour or less burning only gas and/or distillate fuel oil containing 0.50% sulfur by weight or less;

(c) Internal combustion engines under 3,000 horsepower;

(d) Laboratory equipment used exclusively for chemical or physical analyses;

(e) Small gas-fired incinerators installed in private residential dwellings that are of a design approved by the Director;

(f) Sources of minor significance as specified by the Director;

(g) Sources for which there is no applicable emission standard or other emission requirement established under, by, or pursuant to the Act; and,

(h) Mobile sources, whether or not designated as subject to mandatory inspection, maintenance, or emission requirements pursuant to Ga. Code Ann. 43-2705(10). This exemption relates only to the requirement for a permit issued under the Act, not to any other requirement under the Act, and in no way affects any requirement for a permit, license, or a certificate under any other law. This limited exemption from the permit requirements of the Act shall in no way affect the applicability of any other requirement related to mobile sources, or any other requirement or limitation which may affect mobile sources.

(7) Combined permits and applications. The Director may combine the requirements of and the permits for construction and operation (temporary or otherwise) into one permit. He may likewise combine the requirements of and applications for construction and operating permits into one application.

(8) (a) Each application for a permit to construct a new stationary source or modify an existing stationary source shall be subjected to a preconstruction or premodification review by the Director. The Director shall determine prior to issuing any permit that the proposed construction or modification will not cause or contribute to a failure to attain (as expeditiously as practicable) or maintain any ambient air quality standard, a significant deterioration of air quality, or a violation of any applicable emission limitation or standard of performance or other requirement under the Act or this Chapter (391-3-1). Each person applying to the Director for a permit to construct a new stationary source or modify an existing stationary source shall provide information required by the Director to make such

determination.

(b) In addition to any other requirement under the Act, or this Chapter (391-3-1), no permit to construct a new stationary source or modify an existing stationary source shall issue unless such proposed source meets all the requirements for review and for obtaining a permit prescribed in Title I, Part C of the Federal Act, and Section 391-3-1-.02(7) of these Rules.

(c) In addition to any other requirement under the Act or this Chapter (391-3-1) no permit to construct a new or modified major stationary source after July 1, 1979, [to be located in any area of the State determined and designated by the Director as not attaining a National Ambient Air Quality Standard or in areas contributing to the ambient air levels of such pollutants in such areas of nonattainment], shall be issued unless:

1. The Director determines that by the time the source is to commence operation, total allowable emissions from existing sources in the region, from new or modified sources which are not major sources or facilities, and from the proposed source, will be sufficiently less than total emissions from existing sources allowed prior to the application for such permit to construct or modify, so as to represent (when considered together with other air pollution control measures legally enforced in such area or region) reasonable further progress (as defined in Section 171 of the Federal Act); or, unless the Director determines that emissions resulting from the proposed new or modified source will not cause or contribute to emission levels otherwise allowed from new or modified major stationary sources which would prevent the State from meeting the National Ambient Air Quality Standards as expeditiously as practicable and [except for those areas for which an extension has been obtained by the State pursuant to Section 172(2)(a)] no later than December 31, 1982 with respect to National Primary Ambient Air Quality Standards; and

2. The proposed source is required to comply with the lowest achievable emission rate; and

3. The owner or operator of the proposed new or modified source has demonstrated that all major stationary sources owned or operated by

such person (or by an entity controlling, controlled by, or under common control with such person) in this State are subject to emission limitations and are in compliance, or on a schedule for compliance, with all applicable emission limitations and standards under the Act; and

4. If a proposed major source is to be located in or to contribute to the ambient air levels of either photochemical oxidants or carbon monoxide (or both) and the State has demonstrated to the satisfaction of the Administrator that attainment of the Nationl Ambient Air Quality Standards for such pollutants cannot be met by December 31, 1982 in such area, there has been an analysis (by the person proposing such construction or modification) of alternative sites, sizes, production processes and environmental control techniques for such proposed major source which demonstrates to the satisfaction of the Director that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its proposed location, construction or modification; and

5. The State's Implementation Plan (approved by the Administrator pursuant to the Federal Act) is being carried out in the nonattainment area in which the proposed source is to be constructed or modified in accordance with the requirements of Title I, Part D of the Federal Act.

(d) With respect to the permitting of sources to be constructed or modified before July 1, 1979, the review and other requirements of Section 129A of the Federal Act shall be met prior to issuance of any permit.

(e) The Director shall, upon analysis of the ambient air in the State, determine, and so designate, those areas of the State, if any, which are not attaining any National Ambient Air Quality Standards specified under the Federal Act, and any area contributing to the ambient air level of any such pollutant (for which such a standard has been established) in such areas of nonattainment. The Director's analyses, determinations, and designations hereunder shall be used for the purpose of implementing the requirements of this section, shall be continuing, and shall be conducted in a manner sufficient to meet the requirements of Title I, Part D of the Federal Act.

391-3-1-.04 AIR POLLUTION EPISODES.

(1) In order to prevent the occurrence of air contaminant concentrations great enough to cause danger to the public health, the Department will proclaim that an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency exists when the meteorological conditions are such that an air stagnation condition is in existence and/or the accumulation of air contaminants in any place is attaining or has attained levels which could, if such levels are sustained or exceeded, lead to a substantial threat to the health of persons in the specified area affected.

(2) The Department will maintain a listing of specific air contaminant concentrations which, if reached or exceeded at any monitoring site, will give rise to the proclamation of a respective air pollution episode level. This listing will be available and furnished to any interested person, upon request to the Department. These ambient concentration levels will be in graded levels with more restrictive control requirements being necessary as the concentrations progress upward, with the Air Pollution Emergency level being one which should never be reached and the most stringent control actions are necessary for reduction of air contaminant levels in the atmosphere.

(3) The proclamation of an air pollution episode level can be for a specific, limited area affected by certain emissions, and shall always be accompanied by the expectation of air stagnation conditions for twelve (12) hours or more.

(4) Upon the request of the Department, any source owner, operator, or lessee shall prepare and furnish to the Department written Air Pollution Episode plans for use in reducing the emission of air contaminants when the source is notified of the existance of an Air Pollution Alert, Warning or Emergency in its area of influence. Such plans shall identify the sources of air contaminants, the amount of reduction to be achieved, the method by which the reduction will be accomplished, and the times required to put each such reduction step into effect. The plan will specify progressively more stringent control actions to be taken at each of the air pollution episode levels, with the Alert level needing the least reduction and the Emergency level requiring the most reduction of emissions. The submitted Air Pollution Episode plan shall be subject to review and approval by the Department. If the plan is judged to be inadequate by the Department it shall be disapproved and an amended plan will be prepared and resubmitted by the source owner, operator, or lessee.

(5) When notified by the Department of the existence of an Air Pollution Alert, Warning, or Emergency in an area influenced by its emissions, the source owner, operator, or lessee shall immdeiately put into effect the control actions enumerated in the approved pollution episode plan on file with the Department, as appropriate for the specific episode level in effect.

(6) Once proclaimed by the Department, an air pollution episode level will remain in effect until the criteria for air contaminant concentrations applicable to the respective level are no longer met. At such time, the next lower status will be assumed.

Legal Authority: Ga. Laws 1964, pages 507, 557 and as amended by Ga. Laws 1967, page 581 et seq., and Ga. Laws 1971, pages 184, 185.

391-3-1.05 Variances

(1) The Director may grant specific or general classes of exceptions to the particular requirements of any rule, regulation, or general order, to such specific persons or class of persons or such specific existing stationary (as of June 1, 1972) source or general class of such sources subject to any requirement of, under, or pursuant to the Georgia Air Quality Act of 1978, upon such conditions as he may deem necessary to protect the public, health, and welfare, if, upon petition, he finds that strict compliance with such rule, regulation, or general order is inappropriate for one of the following reasons:

(a) Because of conditions beyond the control of petitioner, or;

(b) Because of special circumstances which would render strict compliance unreasonable, unduly burdensome, or impracticable due to special physical conditions or causes, or;

(c) Because strict compliance would result in substantial curtailment or closing of the business or operation, or;

(d) Because no alternative facility or method of handling is available.

(2) Notwithstanding the provisions of subsection (1) above, the Director shall not in any case authorize an exception to any requirement, unless such exception fully complies with an approved State Implementation Plan meeting all the requirements of Title I, Part D, of the Federal Act, and fully complies with all the requirements of Title I, Part C of the Federal Act, all the requirements for an approvable revision to the State Implementation Plan pursuant to 40 USC § 7410(a), as amended, and all the requirements under 42 USC § 7411, as amended, and 42 USC § 7412, as amended. Any exception granted is and shall be subject to the Director's emergency powers under Ga. Code Ann § 43-2715, as

amended, and the Administrator's emergency powers under Title III, Section 303 of the Federal Act. No exception to any State Implementation Plan requirement shall become effective until the Plan revision based upon such exception is approved by EPA. If a State plan revision based upon an exception has been approved as part of the State Implementation Plan by EPA, and is subsequently disapproved by EPA, the exception shall be immediately void and of no affect, and the general regulatory requirement shall apply to the person or source to which such exception applied before the disapproval. In the event of such disapproval, the affected person or source shall meet the regulation requirements as expeditiously as practicable.

(3) Any person or persons seeking an exception to any regulation requirement shall do so by filing a petition for such exception with the Director. The Director shall promptly investigate such petition and shall cause the petitioner to have published in a newspaper of general circulation in the area of the source to which the exception, if granted, is to apply, notice of the request for such exception, notice of the date, time, and place of a public hearing to be held to receive comments upon and evidence with regard to the granting of such petition, and notice of the person to whom and the address at which comments may be mailed, within 30 days after the notice is published. Upon consideration of all the evidence and supporting data submitted by the petitioner, and upon consideration of all evidence and comments received by mail, postmarked within 30 days of the date of publication of the notice, the Director shall issue an order, either denying or granting the requested exception. Any exception granted may be limited in time. Any exception may be conditioned upon compliance with interim or alternate standards, limitations, or requirements and shall contain a schedule requiring compliance with the regulation to which the exception is granted as expeditiously as practicable. The Director shall evaluate the petition and the consequences of granting or denying the requested exception, giving due regard to the factors listed in Ga. Code Ann. 43-2708, as amended, consistent with the public health, safety and welfare.

(4) Any person aggrieved by the order of the Director upon such petition may request a review of such order in accordance with the provisions of Ga. Code Ann. 43-2717.

(5) Any exception granted may be revoked or modified by the Director after a public hearing which shall be held after giving at least fifteen (15) days notice to all persons known to the Director who will be subjected to greater restrictions or more stringent regulatory requirements if such exception is revoked or modified, and to any person or persons who have filed with the Director a specific written request for such notification. Any order of the Director revoking or modifying any exception previously granted, may be reviewed in accordance with the provisions of Ga. Code Ann. 43-2717; provided, however, that during the pendency of any such

review the source or person to whom the exception applied prior to such revocation or modification shall as expeditiously as practicable comply fully with the general regulatory requirements if the order is one of revocation, or the terms of the modified exception if the order is one of modification, after issuance and notice of the Director's order of revocation or modification. Any notice required herein may be made upon petitioner by mailing (U.S. Post Office, adequate postage) a copy of the notice to order to either the address appearing on the application for a permit for the affected source or to such other address as the petitioner may provide, and upon any other person by mailing to the address provided in the persons specific request for notification.

391-3-1-.06 WATER QUALITY CONTROL.

Any person owning or operating an air-cleaning device, from which there is waste material which may cause pollution of the waters of this State, shall comply with laws, rules and regulations administered by the Georgia Water Quality Control Board.

Legal Authority: Ga. Laws 1964, pages 507, 557 and as amended by Ga. Laws 1967, page 581 et seq., and Ga. Laws 1971, pages 184 and 185.

391-3-1-.07 INSPECTIONS AND INVESTIGATIONS.

In carrying out the provisions of these rules, regulations and standards, the Department, or its duly authorized representative, shall have the power to enter at reasonable times upon any private or public property, and the owner, managing agent, or occupant of such property shall permit such entry for the purpose of inspection and investigating conditions relating to pollution or the possible pollution of the air of the State, under the provisions of Chapter 88-907 of the Georgia Code Annotated, (Georgia Laws, 1967, page 587).

Legal Authority: Ga. Laws 1964, pages 507, 557 and as amended by Ga. Laws 1967, page 581 et seq., and Ga. Laws 1971, pages 184 and 185 .

391-3-1-.08 CONFIDENTIALITY OF INFORMATION.

In conformance with Chapter 88-908, of the Georgia Code Annotated, (Georgia Laws 1967, page 587), any information relating to secret processes or methods of manufacture or production obtained by the Board, Department, or their employees in carrying out the provisions of these rules, regulations, and standards, shall be kept confidential.

Legal Authority: Ga. Laws 1964, pages 507, 557 and as amended by Ga. Laws 1967, page 581 et seq., and Ga. Laws 1971, pages 184 and 185.

391-3-1-.09 ENFORCEMENT.

(1) The administration and enforcement of these rules and regulations shall be as prescribed in Ga. Code Ann. 43-2701, et seq., as amended (Ga. Laws 1978, p. 275 et seq., as amended), Section 17a of the Executive Reorganization Act of 172, as amended (Georgia Laws 1972, pages 1015, 1926-27, as amended), and in compliance with the applicable minimum requirements as prescribed by the Georgia Administrative Procedure Act (Georgia Laws 1964, page 338, as amended).

(2) To the extent provided by law, the Director will make every effort to remedy any violations of the provisions of this Act, the rules and regulations promulgated thereunder or any order of the Director, by conference, conciliation and persuasion prior to undertaking enforcement action in accordance with the Act.

391-3-1-.10 CONTINUANCE OF PRIOR RULES.

In furtherance of the legislative intent expressed in Ga. Code Ann. 43-2723, all rules or regulations, or amendments thereof, promulgated or enacted by the Board of Natural Resources prior to the effective date (March 6, 1978) of the Georgia Air Quality Act of 1978, Ga. Laws 1978, p. 275, et seq. (Ga. Code Ann. 43-2701 et seq.), are hereby readopted and continued as so amended, as rules or regulations adopted under the authority of the Georgia Air Quality Act of 1978. As readopted, such rules or regulations are and shall be subject to all revisions, repeals, additions, or amendments promulgated or adopted by the Board of Natural Resources subsequent to March 6, 1978.